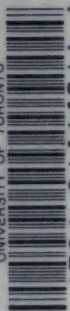


THE MODERN PHARMAGIST

Vol. 1

UNIVERSITY OF TORONTO



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G. R. Gibbard



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THE MODERN PHARMACIST

A series of articles, somewhat modified,
that originally appeared in N. A. R. D.
NOTES, the Journal of the National
Association of Retail Druggists.

With some miscellaneous
additions.

BY

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P R E F A C E

THE object of this volume is to furnish a means to the pharmacist and his assistant of gaining practical knowledge to further the manufacture and use of the official drugs and preparations of the U. S. P. and N. F., and such other new and non-official drugs and preparations as are frequently prescribed by physicians.

This book is in a class by itself, being supplementary to the above legal standards and other recognized works on the art of pharmacy. It aims to be of practical use only and hence any faults of the book should not be magnified, but it should be judged as a whole, rather than any part of it be selected for criticism. It is the right book in the right place.

There is an apparent necessity for a work of this kind and its teachings should prove of permanent benefit to pharmacists, should create most harmonious feelings between members of the pharmaceutical profession and between pharmacists and physicians also.

Our calling as pharmacists, being an old, honorable and upright one, and one whose care and honor must ever be in the hands of well-meaning and well-educated men and women, it behooves us to be forever and ever watchful of our trust.

This volume does not aim to be a complete one by any means, its teachings being merely in the nature of a guide and experiment for yet greater and better work by the pharmacist himself who reads it.

The letters which are found in this book in the chapters on propaganda are those that have been sent out by the National Association of Retail Drug-gists in furtherance of the U. S. P. and N. F. propaganda. It may assist the reader to know that the chapters in the laboratory part of this book were published simultaneously with those in the propaganda part, and hence any reference from one department to the other will be found in the chapter having a similar number. For instance, the letter mentioned on page 38, chapter XIX, will be found in chapter XIX of the propaganda department, etc.

Its aim is "better pharmacists, fewer pharmacies and greater financial and professional success for the pharmacist." Grateful acknowledgment is hereby made to those pharmacists who have in any manner assisted in making this volume possible for their fellow craftsmen, and especially to Thomas H. Potts and Charles M. Carr.

The Author.

CONTENTS

THE DRUG STORE LABORATORY

This department teaches the practical and commercial value of the laboratory as a necessary adjunct of the drug store. It gives many new and valuable methods of manufacturing reliable, uniform, standard and active preparations. The physician wants this kind, being thoroughly tired of the many fraudulent nostrums that have claimed his attention so many years.

THE U. S. P. AND N. F. PROPAGANDA

This department aims to present in a plain and straightforward manner the need of harmonious relations between the professions of pharmacy and medicine; the manner in which this need can be fulfilled and the results possible from the practical application of its teachings, viz.: a square deal for the pharmacist, the physician and the public.

DRUG STORE ADVERTISING AND SALESMANSHIP

In these chapters are given fundamental principles of the modern science of advertising. Details are gone into quite thoroughly and understandingly, to correspond with the other departments of the work, and the suggestions make for the financial well-being of the pharmacist.

PRESCRIPTION PRICING AND COMPOUNDING

The various chapters of this department are intended to assist in solving difficulties often met with in the filling of prescriptions and to furnish information upon the much neglected subject of prescription pricing.

BUSINESS ARITHMETIC

A short treatise on the proper method of fixing the selling price of drug store merchandise, that a sufficient net profit may remain. Also the method of calculating net profits, thus enabling the pharmacist to establish the financial status of his business.

PRESCRIPTION PRICING SCHEDULE

MISCELLANEOUS ITEMS AND USEFUL INFORMATION

A very complete index will be found at the end of this volume for convenience of reference.

The Drug Store Laboratory

CHAPTER I.

If druggists, all of them, would but once realize that a laboratory is simply a workshop for themselves, even though it only consists of a large table, how much easier it would be for them to pay rent, etc.

One reason for your existence as a druggist, (and for the purpose of emphasis in this article, the only reason), is to make medicinal preparations—to make them yourself—this is not only theoretical, but intensely practical, for it pays, and pays well.

A Much-Needed Communion.

Just take one hour, Mr. Druggist, and “commune with your own soul” upon the following:

“Why did I spend three long years of my young life learning the mysteries of the drug business?”

Why did I spend two years more (besides much money), in taking a college course?

Why did I learn to make tinctures so perfectly in college?

What good has it done me to have been the best student in making a perfect elixir?

Why do I lounge around and find it hard work to kill time, when I know that some day I will be unable to earn a living?

Why Factory Elixir.

Why do I dispense P. W. & Co.’s elixir when not even called for, and which costs from 65c to 95c a pint, when I can by proper representations to my physicians, dispense my own perfect product, costing not over 30c a pint?

Why Donate to Manufacturers.

Why do I give, as a donation, these profits to the large manufacturing

houses, when my family needs them ten times worse?

Why am I not a true pharmacist, true to my bringing up, and getting all the pleasure and profit out of the profession that there is in it?

Any person who communes thus, and cannot make up his mind to do his own manufacturing and do it right, is no druggist.

Have No Time for Laboratory Work.

The reason generally given that druggists have no time to make their own preparations and specialties, and would rather buy them, even at a higher price, is certainly a short-sighted one; for the money saved, in a fairly prosperous pharmacy, is more than enough to pay an extra clerk for making them. But instead, you have these “extra clerks” traveling all over the country, selling the manufacturing houses’ specialties, fluid extracts, etc.

Of course, these houses can make as good a preparation as you can if they want to, can test and standardize their drugs and preparations as well as you, but is that any reason why you should pay them a big profit for doing it?

Willing to Pay for Research Work.

We, of course, should not begrudge these houses their triumphs and profits which are procured from original research, in such matters as toxins, serums, etc., but we must realize for our own good that the official preparations and our own specialties should be made by the druggist himself, otherwise pharmacy has a poor outlook for the future—a very poor and dreary outlook, indeed!

These houses have a large demand for tinctures, elixirs, solutions, syrups, and cheap cough syrups, headache

powders, blood purifiers, etc., and this demand should not exist—and it would not exist if we were all pharmacists in the true sense of the word.

Some Druggists and Doctors in Same Class.

Druggists who are forever and ever complaining that the doctors are allowing these houses to do their thinking, must also well consider the fact that these houses have done the druggists' thinking, and if such houses can put up a compound of squills, henbane, digitalis, etc., call it Cardiacs, or some other fanciful name, and make the physician prescribe it, why can't the druggist do the same thing, with a more scientific and accurate preparation, without the fancy name and without secrecy?

Since the advent of the pure food and drugs law, some of these greedy houses are even asking the physician to prescribe "their make" of tinctures, etc.

Wake Up, Mr. Pharmacist.

Come, American Pharmacists, you must wake up and start manufacturing. Start at once.

We will take four official preparations and see how much can be saved by making them. In the figures small fractions are omitted.

1. Fluidextract of Cascara Sagrada. 2 pints.

2 lbs. Cascara sagrada bark, cost.	\$0.70
13 oz. Alcohol, cost.	.26
19 oz. water, cost.	.00
½ pint alcohol, waste in process.	.16

Total cost\$1.12

High-price manufacturer charges \$4.50

Low-priced manufacturer charges \$2.40

Other manufacturers from \$2.40—4.50
—refer to your price-lists.

Making Fluid Extract.

In regard to making fluid extracts much depends upon the quantity consumed—if the demand is sufficient to justify the purchase of a still and condenser for recovering the alcohol, it would certainly be very profitable. The process of repercolation, however, is to be preferred.

Figuring time in calculating cost is not fair to you, for you are not competing with others; you are merely putting in your spare time to profitable advantage—your own time for your own good.

Did you ever imagine that when you bought a ready-made fluid extract, it was always U. S. P. strength? Not yet! Many are no better than 50 per cent tinctures, and from this up to full strength.

In justice, however, to a very few manufacturers, it must be said that these below-standard ones are sold mostly by houses that cater to physicians exclusively, mail order houses, and such trash. The same is true with other preparations.

A Potash and an Iron Preparation.

2. Liquor Potassii hydroxidi. 2 pints.

2 oz. Caustic Potassa, pure.	\$.04
Distilled water, q. s. for 2 pints.	.04

Cost per quart.	\$.08
Cost from wholesaler, 24c + a useless bottle costing from 7c to 15c extra.	
Cost from manufacturer, 47c, bottle included.	

This is a simple five-minute process. (Note:—Use a Rubber cork for bottle.)

3. Elixir Iron Quinine and Strychnine Phosphates. 2 pints.

Iron phosphate, 4½ dram.	\$.02
Quinine, 2¼ dram.	.16
Strychnine, 4 gr.	.02
Acid. Phosphoric, ½ dram.	.01
Ammon. carb., 2¼ dram.	.01
Acetic acid, 1 oz.	.02
Alcohol, 2 oz.	.04
Aq. Ammon, Aqua dist., aa q. s.	.00
Aromatic Elixir, 28 oz.	.20

Cost per quart.....\$0.48

Referring to your price list you will find you are paying from 90c to \$1.21. Note:—Keep this Elixir in a dark place, or in dark bottles.

Tincture Vanilla.

Vanilla, 3¼ oz., best long Mexican	\$1.20
Sugar, 7 oz.	.03
Alcohol, 22 oz.	.44

Water, 12 oz..... .00

Cost per quart.....\$1.67

You pay the manufacturer from \$2.16 to \$3.24.

Note:—Start your Vanilla extract in October for the next year's use. It will be much improved by ageing in a warm store over winter.

In comparing these prices, bear in mind that we are supposing that every preparation turned out by the manufacturing houses is "exactly U. S. P. standard."

CHAPTER II.

A very handy and useful addition to your laboratory table is a support for your percolator and funnel—something stationery, attached to the wall if possible, and at such a height above the table to admit of easy manipulation. (See also Chapter VI.)

A Two-Foot Board.

Take a board, about 8 inches wide by 2 feet long, saw holes about 8 inches apart, admitting the percolators which may hang in these holes by the collar. The board should be properly braced and made safe.

The same scheme can be worked in connection with funnels for filtering.

Then the two most important operations, those which are performed more frequently than others, are always out of your way and in no danger of spilling or knocking over.

Your gas stove, if your city has gas, finds its proper place on the table. If you have no gas, an ordinary small kitchen stove will be found handy in your laboratory room.

What the Drug Store Laboratory Needs.

One reason why many druggists are afraid to do their own manufacturing is they imagine that it is going to cost them a lot of money to equip a laboratory.

You need nothing but what you already have, viz., a large and a small percolator, two or three ribbed fun-

nels, and an enameled casserole with cover.

It is truly surprising what little apparatus is needed for the manufacture of the simple standard preparations. Your skill in using the apparatus is the important thing.

Keep Extra Profit in Mind.

What you must constantly bear in mind in this manufacturing proposition is the extra profit.

Sales, receipts, expenditures, salaries, discounts, all are secondary matters; profits are what you want first, last and all the time, for with your profits—your net profits—you figure into the rosy future.

When you come to study this question from a practical business standpoint you will find that you cannot give one good reason, as a pharmacist, for buying any tincture, solution, elixir, syrup, cerate, ointment, cough syrup, blood purifier, liniment, etc.

An Example.

Even such an important preparation as Fluid Extract of Ergot, you can make it "exactly right, pharmaceutically and therapeutically." You order a 5-pound lot of ergot from the wholesaler, and by examining it thoroughly according to the description given in the U. S. P., with the aid of only three of your healthy senses—seeing, smelling, tasting—you can tell whether it is fit to be used in medicine.

If it is not fit, send it back—the neglect of this being your first great mistake, the buying and keeping of poor grade drugs. If your ergot is fit, you can certainly reduce it to a No. 60 powder, and proceed with the maceration and percolation.

Read Up in the Dispensatory.

Just read up in the Dispensatory what it says about Ergot, its fluid extract; make some, use it in your next prescriptions and note results.

You have been led to believe by manufacturers that you cannot make this fluid extract and you took their word for it—you surrendered without

going into a fight, the same as you are letting them tread upon you all the time.

Pharmacists Are Responsible.

It will not be amiss to state here that **you, and you alone**, are responsible for the full strength and quality of your pharmacopoeial preparations and substances, in the eyes of the law.

We will now look over six official preparations that are very generally bought ready-made by druggists and see what can be saved by making them in your laboratory.

Save 12 Cents a Pound.

1. Liq. Plumbi subacetatis, U. S. P. (Goulard's Extract) 2 1/5 lbs. (1,000 gm).

Lead acetate, 6 oz. +	\$0.07
Lead oxide, 3 2/3 oz. +	.03
Distilled water to make 2 1/5 lbs.	.03
Heat, 1/2 hour.	.02

Cost to make.....\$0.15
being approximately 7c per pound.
The cost of this preparation from the wholesaler is 12c per lb. + the cost of the inevitable useless bottle, compared with the cost from manufacturer, 20c lb., bottle included.

A Large Saving Here.

2. Essentia Pepsini, N. F., 2 pints.

Pepsin, 328 gr.	\$.22
Rennin, 240 gr.	.20
Lactic acid, 30M.	.01
Tr. Sweet Orange peel, 150M.	.01
Glycerin, 4 oz.	.05
Alcohol, 1 1/2 oz.	.03
Syrup, 2 fl. oz.	.01
White Wine, Angelica, 12 fl. oz.	.12
Purified Talcum, 240 gr.	.01
Water to make 32 oz.	.00

Cost to make, per quart.....\$0.66

You pay the manufacturer all the way from 98c to \$2.25 for 2 pints.

Note—If pale, sweet and light colored Angelica wine is used and the essence let stand fully two weeks before filtering, the essence will be as clear and active as a preparation of this kind can possibly be.

Increase Your Profits 50 to 100%.

3. Tincture Opium, U. S. P. (Laudanum) 1,000 Cc. (2 1/8 pts.).

Granulated Opium, 100 gm.	\$1.65
Alcohol, 400 Cc.	.27
Water, 400 Cc.	.00
Diluted Alcohol (about) 200 Cc.	.08

Cost to make.....\$2.00

Being approximately 94c per pint.

You pay for the purchased product from \$1.40 to \$1.87, per pint.

A Popular Product.

4. Liq. Antisepticus Alkalinus, N. F., 2 pints.

Potassium Bicarbonate, 1 oz. tr.	.01
Sodium Benzoate, 1 oz. tr.	.03
Sodium Borate, 1/4 tr.	.01
Thymol, 3 gr.	.01
Eucalyptol, 3M.	.01
Oil Peppermint, 3M.	.01
Oil Gaultheria, 6M.	.01
Tr. Cudbear, N. F., 1/2 fl. oz.	.01
Alcohol, 2 fl. oz.	.04
Glycerin, 8 fl. oz.	.10
Talcum pure, 150 gr.	.01
Water, q. s. ad 32 fl. oz.	.00

Cost to make.....\$0.25

This is an approximate cost of 12c per pint.

For a ready-made alkaline antiseptic you pay from 39c to 45c per pint, while the secret preparations under varying names cost all the way from 53c to 75c per pint.

Reduce Your Cost One-Half.

5. Pulvis Glycyrrhizae Compositus U. S. P. (Compound Licorice Powder)

2 1-5 lbs. 1,000 Gm	
Senna powd., 180 Gm.	\$.10
Glycyrrhiza powd., 236 Gm.	.06
Sulphur washed, 80 Gm.	.02
Oil Fennel, 4 Gm.	.02
Sugar powder, 500 Gm.	.08

Cost to make.....\$0.28

This is, per pound, about 13c; cost from wholesaler, per pound, 25c; cost from manufacturer, per pound, 36c.

Cost Lower; Purity Certain.

6. Pulvis Effervescentes Comp., U. S. P. (Seidlitz powders) 120 sets (1 doz. boxes).

Sodium Bicarbonate, 310 Gm...	\$.03
Potassium and Sodium tartrate, 930 Gm. ....	.58
Tartaric acid, 270 Gm.....	.23
Paper, boxes, labels.....	.24

1 doz. boxes, cost to make....\$1.08

Per doz. from manufacture, \$1.55 to \$2.25.

Always bear in mind, when comparing prices, that the prices you pay for the ready-made preparations are supposed to represent preparations that comply strictly with the U. S. P. and N. F. standards—no better, no worse.

Competition Often Lowers Quality.

A very important point and not to be overlooked is the fact that competition among manufacturers is so fierce that they cut down prices as far as they dare, and when no further cut can be made on a fairly pure product, then the cutting begins on the product itself—on the material.

Instances can be mentioned in three of the preparations above. The Rochelle salts of Seidlitz powders are often replaced by cheaper saline salts, the senna and licorice quantities in Comp. Licorice powder are lessened and the Sulphur amount increased, and with Tincture of Opium, a very important product, liberties are taken that are simply astonishing, gum opium being used of any quality, 25% alcohol in manufacturing;—anything to cheapen cost.

CHAPTER III.

While most druggists are able to do good work at percolation, filtering and the various other simple processes as they come up from day to day, there are many little details which if attended to properly, are of great value in final results.

One of the simplest processes we have is filtering, still the knack of doing it right, the little details that go with it, are not known by all druggists, and this has been a great factor in relegating the making of many preparations to the manufacturing houses.

Tricks in Filtering.

In the first place, make none but pleated filters; that is, when half opened, it has the appearance of a fan; don't filter everything through a pint funnel, the waste is too great,—have also a quart and a half gallon funnel.

The cost is but little more, and your filtering will not require so much of your time.

The most important thing, however, is to moisten your filter in the funnel with some of the menstruum, that is, water, alcohol, or a mixture of the two, according to the proportion in which these two liquids exist in the preparation about to be filtered. This prevents clogging and is certain to hasten the process to the utmost.

Quick Filtering.

Whenever possible, let your preparation stand awhile before filtering, even if only over night—this generally gives the separate ingredients a better chance to “get acquainted with one another” and obviates the necessity of repeated filterings, as the liquid comes through perfectly clear at once, and faster than would otherwise be the case.

If these few details are attended to, there will be no more such sights in your back room as “a two day job of filtering one quart of Essence of Pepsin,” “a week for filtering one gallon of Simple Elixir,” or “a whole day to filter two pints of Cinnamon Water.”

“Three Other Details.”

Do you fill two ounce pomade bottles with petrolatum, carbolic salve, pomade for the hair, etc.? Do you spill much of the preparation in bottling? One of the handiest utensils for this process is an old fashioned tin coffee pot.

There is even a knack in pulling corks from bottles and you have probably often spilled some valuable fluid by inserting the corkscrew, holding the bottle firmly with the hand or between the knees, and when the cork comes

out, the "kick" spills part of the contents. By holding the bottle firmly on the floor when extracting the cork, this will never happen.

When the nature of a liquid is such that the cork breaks upon an attempt at removal, the liquid acting much as a cement, especially fluid extracts, clean the inside neck of the bottle thoroughly and moisten the cork with glycerin or petrolatum. It will then always come out easily.

Your inventive genius and practical ideas should find many ways to apply themselves in your laboratory, and it is such minor details, the "little things," that are the money-savers, and that make laboratory work a pleasure.

Assisting Your Enemies.

The following five preparations are certainly easily prepared, yet how often have you purchased them ready made, and added your little mite to build large manufacturing establishments, and enabling their owners to take prolonged European trips.

Ung. Hydrargyri, U. S. P.	1000 Gm.	2 1/5 lb.
Mercury	500 Gm...	\$0.86
Oleate Mercury.....	20 Gm...	.04
Prepared Suet.....	230 Gm...	.07
Benzoinated Lard	250 Gm...	.08

Cost per 1000 Gm.....\$1.05

Cost per pound, 48c. For the ready-made ointment you pay from 63c to \$1.08, and then you don't know what you have, unless you assay it. The oleate of mercury in the above is best made by yourself, at a cost of 5c an ounce, as compared with the ready-made at 20c an ounce or over.

Liquor Ferri chloridi, U. S. P., 1000 Gm. (2 1/5 lb.).	
Iron	125 Gm...\$0.03
Hydrochloric acid.....	680 Gm... .21
Nitric Acid, about.....	70 Gm... .02
Distilled Water, q. s. ad	1000 Gm... .01
Heat .....	.05

Cost per 1000 Gm.....\$0.32

This is a cost of 14 1/2c per lb. for a

chemically pure product. The ready-made solution costs from 15c to 25c a pound, and as it is very seldom made from pure acids, the product is correspondingly inferior, besides you pay from 9c to 15c for a useless bottle.

Great Saving on Two Much-Prescribed N. F. Elixirs.

Elixir Terpini Hydratis. 32 fl. oz.	
Terpin Hydrate, 256 gr.....	\$0.02
Tr. Sweet Orange Peel, 150 M...	.01
Sol. Saccharin, 15 M.....	.01
Alcohol, 13 fl. oz.....	.26
Glycerin, 13 fl. oz.....	.16
Syrup, q. s. ad., 32 fl. oz.....	.03

Cost per quart.....\$0.49

Referring to your price list you find that you pay for the ready-made elixir from 96c to \$1.76 per quart.

Any addition to this elixir is easily made by solution, as Codeine, Heroin, Guaiacol, Creosote, etc.

Elixir Glycerophosphatum. 32 fl. oz.	
Sodium Glycerophosphate (75 per cent.), 360 gr.....	\$0.21
Calcium Glycerophosphate, 128 gr.	.06
Phosphoric Acid, 115 gr.....	.01
Glycerin, 9 1/2 fl. oz.....	.10
Aromatic Elixir, 9 1/2 fl. oz.....	.06
Distilled water, q. s. ad., 32 fl. oz.	.01

Cost per quart\$0.45

The manufacturer charges for this from \$1.20 to \$1.88 per quart.

Note—The large difference in the "cost to make" and "cost to buy" in these two elixirs certainly seems ludicrous and shows how dreadfully deficient the druggist has been in regard to "looking out for himself."

Syrup Lactucarii, U. S. P., 1000 Cc.—2 1/8 pt.—2 7/8 lbs.	
Tr. Lactucarium, 100 Cc.....	\$1.10
Glycerin, 200 Cc.....	.09
Citric Acid, 1 gm.....	.01
Orange Flower Water, 50 Cc....	.02
Syrup, q. s. ad., 1000 Cc.....	.08

Cost to make\$1.30

Being about 61c per pint, whereas you pay for the ready-made syrup from

81c to \$1.68 per pint, according to whom you buy it from.

Banish Secrecy.

Elixirs in general are important products, and they are probably a very large factor in the druggist's buying his preparations from the manufacturing houses. But, Mr. Druggist, don't you know what you are capable of, don't you feel like helping in the great general movement that is taking place all over the country among retail pharmacists in endeavoring to forever banish this dark-age relic in medicine—"secrecy?"

Elegant Elixirs.

As far as elixirs are concerned, you can certainly dissolve chemicals in water or alcohol, you can mix and measure solutions, you can let the finished product stand awhile, and you can then filter it. That is all there is to it, and you have produced the "much-prized, highly efficient, clear, transparent, elegant, sparkling elixir, containing exactly so much per fluid-ounce," that the manufacturing house says you cannot make.

You **can** do it, and you can make them of U. S. P. and N. F. strength, which is something most of them **will** not do.

CHAPTER IV.

The benefit of good intelligent laboratory work to the druggist is that he secures a first-class preparation which he will not have the least hesitancy in dispensing; also a great saving in price amounting to a large sum of money in a year's time—in fact, more than enough to fit up a first-class laboratory.

But more important than either, it causes you, slowly but surely, to become the best advertisement of your store, both to the public and physicians—because the manufacturing knowledge which you possess, and learn, and talk, is positive knowledge, born of experience, and nothing so im-

presses the public and the physicians as a man who "knows his business."

The People Don't Know.

You take it for granted that the people know your importance, that they know you make all your preparations—but they don't—the people **don't** know it.

Most people think you buy everything, and if you will at every favorable opportunity inform them that all the liquids they see on the shelves and in your back room are made by yourself, you will be a great gainer thereby, for your customers will do much advertising for you, on the strength of what you tell them.

One very important help in the laboratory, and this also applies to the prescription department, is the ability to pick out a good mortar, providing you want to do good, clean and rapid work, as you should.

Three Kinds of Mortars.

You should have three kinds of mortars, even if only one of each kind—an ointment mortar, shallow and wide, and with a perfect surface inside and made of porcelain. If it is not perfect, send it back. Use this mortar for nothing but ointments, suppositories, etc.

Have one mortar specially for pills and capsules, that are to be made into a mass. This must be rather deeper and narrower than is generally the case; the pestle should be longer and with rather a small head, and should be made of wedgewood.

For solutions and emulsions your mortar should be of glass. For powders, one similar to the ointment mortar is about right.

By using judgment in such matters as these you gain time, and you make a better preparation.

A Handy Vessel.

One of the handiest vessels for your laboratory is a graduated half gallon bottle with a wide mouth (or one gallon if you make such large lots of preparations.)

First paste a clean white strip of paper, about 1½ inches wide, down the bottle from neck to base, and press out all air holes. Then set the bottle on a level surface, and pour in 4, 8 or 16 ounces of water (according to how you wish it graduated) and mark the figures on a line that you draw across the strip of paper at the height of the water; then keep on until you reach the neck of the bottle. When finished paint the paper with two coats of collodion. This is handy for percolation, filtration, mixing, etc., and saves much time in measuring.

"Standard" Tinctures.

A few druggists are still under the impression that they are time, money and labor ahead by preparing tinctures from fluid extracts and think they have "standard tinctures."

This "standard" idea, of course comes from the label on the back of the fluid extract bottle, and is put there by people who say you can't even make tinctures, because they want to sell you fluid extracts, they have heavy expenses to meet, etc.

An illustration in Tincture Arnica (given below) will be a revelation to such.

Just stay by the formulas of the U. S. P. and you will be safe on all points—and then if you think you can improve upon them, lose no time in getting your ideas before the revision committee in charge of that grand work.

The following four preparations are a farther illustration of "Keeping profits for yourself."

Tinct. Arnica. 1000 Cc. 2½ pt.

Arnica	200 Gm.	\$.011
Diluted Alcohol.....ad	1000 Cc.	.34
Waste in Diluted Alcohol, about		
8 oz. ....		.08

Cost per 1000 Cc. \$0.53

Cost per pint, 24c. When you buy the tincture you pay from 45c to 68c per pint for it. When you make it from fluid extract the cost is 38c a pint or more—always providing your fluid extract is full strength, but what

manufacturer would consider himself compelled to make a full strength fluid extract of Arnica, for doctors or druggists.

Magma Magnesiae. N. F.—32 fl. oz.	
Magnesium sulphate.....	8 oz. \$.03
Sodium Hydroxide.....	2½ oz. .04
Water, distilled.....ad.	32 fl. oz. .15

Cost per qt. using distilled water. \$.22

You pay the manufacturing house from 70c to \$1.25 for the same amount, and 96c and over for the patent stuff. (See chapter X for a continuation on this preparation.)

Ung. Resorcini comp. 1000 Gm. 2 1-5 lb.

Resorcinol ..	60 Gm.	\$.015
Zinc oxide.....	60 Gm.	.04
Bismuth subnitrate.....	60 Gm.	.24
Oil of Cade.....	120 Gm.	.09
Paraffin	100 Gm.	.04
Petrolatum	250 Gm.	.04
Hydrous Wool Fat.....	350 Gm.	.21

Cost to make..... \$.81

Cost per lb., 37c.

Cost from "manufacturing houses" from \$1.50 to \$1.75 per lb., while the patent ointments cost all the way from \$2.75 to \$4.00 per lb.

Syr. Pini Strobi comp. N. F. (Syrup of White Pine Compound).

White Pine Bark.....	10 2/3 oz.	\$.015
Wild Cherry Bark.....	10 2/3 oz.	.08
Spikenard root.....	600 gr.	.03
Balm Gilead Buds.....	600 gr.	.05
Sanguinaria root	480 gr.	.02
Sassafras Bark.....	400 gr.	.02
Morphine Sulph.....	32 gr.	.17
Chloroform	360 m.	.05
Sugar	96 oz. tr.	.36
Alcohol	about 12 oz.	.24
Water	q. s.	.00
Syrup	q. s.	.00

Cost per gallon..... \$1.17

According to the manufacturers' price list you pay for this all the way from \$1.75 to \$2.88 per gallon.

[This White Pine Cough Syrup put up in 3-oz. bottles, will cost less than 4½c each (53c per dozen) and retails at 25c per bottle. What have you been paying your manufacturing house per gross?]

CHAPTER V.

By a comparison of the various prices on tinctures, syrups, ointments, elixirs, etc., as stated in the four preceding chapters, we find that every time a druggist pays \$1.00 to the average manufacturer for finished preparations, it will cost him 37 cents to make them himself.

While it is useless to go into theoretical details and figures, owing to the fact that every druggist has different wants, still by looking over your bills for the past year, you will find a startling state of affairs, providing you have purchased most of your pharmaceuticals and "specialties."

\$900 vs. \$333: the Difference Yours.

If your business runs about \$20 in daily sales, you will find in your invoices about \$900 a year paid to manufacturers or wholesalers for goods that you could and should have made yourself.

Now applying the proportion as above, \$1 to 37 cents, you find that this \$900 worth of goods that you purchased would only have cost you \$333, if you had done the work yourself—a saving of \$567 a year.

Is this worth while? Is this money of any use to you?

The cost of the apparatus you have used is very small. Of course, you have purchased a few good spatulas and several graduates, but every drug store is supposed to have them. In the course of time as you progress you will even buy more apparatus, and you will not begrudge the money either.

Why some druggists persist in driving away good clerks by having a few broken spatulas and graduates as their only apparatus is hard to understand, but that there are such is a fact.

First-Class Tools Needed.

First-class tools produce first-class work, more of it, increased confidence, increased efficiency of high-priced help, and general satisfaction.

What is a surgeon without first-class instruments?

What is a lawyer without an up-to-date law library?

What is a carpenter without reliable tools?

Would you employ a mason to plaster your room with a broken trowel? Does the woodsman use a dull ax or a dull saw?

Then how or why do you expect to do first-class work with fourth-rate tools?

You and your clerk being thus handicapped by inadequate facilities and poor tools, it takes you a much longer time to do your work, and then it is not done right.

It has been demonstrated that the manufacturers have done the druggist's work and his thinking and have taken his profits.

It will be eminently proper to consider another class of preparations that are causing a lot of mischief, viz., pills and tablets.

How this useless multiplication of "kinds" has driven a good many druggists into the ranks of "The Order of Cranks" is easily seen.

But have they lifted one finger to prevent it? No, not yet—but it is coming.

"The pitcher goes to the well about so often before it breaks."

Calomel as an Example.

Taking Calomel as an example, although morphine, quinine, strychnine, iron salts, etc., would answer equally well, what have you?

First, from 5 to 10 bottles, each containing 100, 500 or 1,000 tablet triturates, from 1/100 gr. up to 2, or even 5 grains.

Second, from 5 to 10 bottles, containing each 100 or 1,000 compressed tablets, different strengths and various beautiful coatings.

Third, from 5 to 10 bottles, containing each 100 to 1,000 pills of various colors and strengths.

Fourth, you may have purchased Calomel powders and tablet triturates.

Then you have your Calomel parvules and granules.

Finally you have your Calomel in combination with other medicinal agents.

It is safe to assume that if you have a fair prescription trade, you have at least 30 bottles containing some preparation of Calomel, and we might almost say, every one unnecessary.

Your Calomel bottle and the sugar of milk bottle stand idly by on the prescription case;—they are wondering what they are there for.

You have a pill machine, probably little used, but it cost you five dollars.

You can easily procure a tablet triturate mould, and a compressed tablet machine.

The cost for either is not as much as the cost of the pill machine, and the price of both is probably less than what you have invested in Calomel preparations.

Now use these machines and stop this waste of money and material and use up some of the calomel and sugar of milk that you have paid for, and be a pharmacist.

A Lost Habit.

To be generous, let us call your indifference, or thoughtlessness, a "lost habit."

This "lost habit" is so firmly entrenched in your make-up that you will probably send to a wholesaler for pills of iodide of iron, or pills of aloes, should you get a prescription calling for them.

You have looked into your "money eating pill and tablet case" and did not find them.

You naturally infer that the physician wants a "ready made" pill, not even realizing that they may be official in the U. S. P.

The prescription calls for 12 or 20, and you buy 100.

The balance, 80 or 88, you carefully put away with the hundreds of others already there to keep them company.

This balance includes not only your profit, but in a great many instances, a part of your capital.

Why don't you make these pills yourself?

Five Preparations to Make.

The following five preparations are extensively used, but many druggists would not think of making them.

A glance at the prices will probably change you from a buyer to a maker.

1. Spiritus Acidi Formici, N. F. 32 fl. oz.

This is the familiar Spiritus Formicarum of the German Pharmacopoeia, Spirit of Ants, "Amelsen-Solritus."

Formic Acid	1 fl. oz..	\$0.15
Distilled Water	7 fl. oz..	.01
Alcohol, ad.....	32 fl. oz..	.46

Cost per quart.....\$0.62

Cost per pint, 31c. For this you pay the wholesaler \$1.25 per lb. for the imported and 50c for the domestic.

2. Glyceritum Bismuthi, N. F. 32 fl. oz.

Bismuth Subnitrate..	5 tr. oz..	\$0.62
Nitric Acid, U. S. P.	5 fl. oz..	.06
Tartaric Acid.....	7½ tr. oz..	.20
Sodium Bicarbonate..	8½ tr. oz..	.08
Glycerin	16 fl. oz..	.22
Distilled Water, ad..	32 fl. oz..	.10

Cost per quart.....\$1.28

Cost per pint 64c. Cost from manufacturer per pint \$1.08. A very valuable preparation of Bismuth, as used in Elixirs, etc.

3. Massa Ferri Carbonatis, U. S. P., 1,000 Gm. 2 1-5 lb.

Ferrous Sulphate.....	1000 Gm..	\$0.33
Sod. Carbon, Monohyd.	460 Gm..	.12
Clarified Honey.....	380 Gm..	.13
Sugar	250 Gm..	.03
Syrup, Water, aa, q. s.		
ad.....	1000 Gm..	.00

Cost\$0.61

Cost per lb. 28c. Cost from manufacturer, 81c.

4. Petrolatum Saponatum Liquidum, N. F. ["Liquid Petrox."]

Liquid Petrolatum.....	400 Gm..	\$0.11
Oleic Acid.....	200 Gm..	.15
Spirit Ammonia.....	100 Gm..	.08

Cost per 700 Gm.....\$0.34

Cost per oz. $11\frac{1}{2}$ c. Purchased from the specialty houses under various trade names costs per oz. 15c to 35c.

5. Pil. Ferri Carbonatis, U. S. P.
1000 Pills.

Ferrous Sulphate Gran.	160 Gm.	\$0.06
Potass. Carbon.	80 Gm.	.03
Sugar	40 Gm.	.01
Tragacanth	10 Gm.	.02
Althaea	10 Gm.	.01
Glycerin, Water, aa q. s.		
ad	1000 pills.	.00

Cost per 1000 pills.....\$0.13

For this pill you pay the manufacturer from \$1.30 to \$2.17 per 1000. A freshly prepared Bland's pill is always to be preferred to any other. When you have told your physician that the pharmacopoeia DIRECTS you to make them fresh, there must be some reason for it, and he will prescribe them.

The reason is that the ferrous carbonate soon turns to ferric carbonate, and the peculiar action of this pill is lost when the change occurs.

CHAPTER VI.

That a great many druggists have no laboratory is probably due to the fact that they think they have no room.

Now, while no one but yourself knows just what room you have, have you thought of every plan to get this additional room?

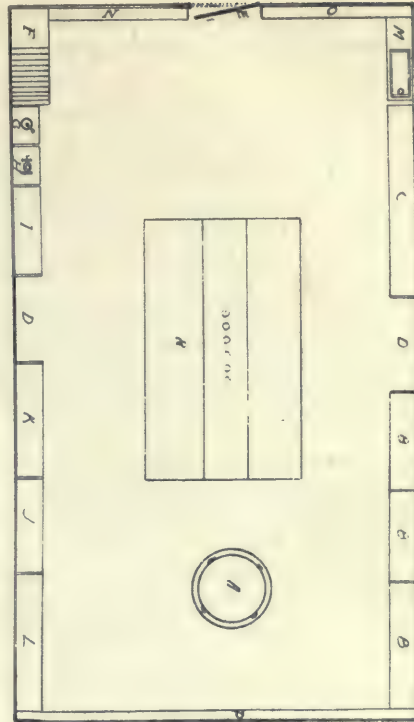
Can't you, by tearing out a wall somewhere or by moving things around get the much-to-be-desired space necessary for your operations; it will not take such a great deal.

The accompanying plan is for a roomy laboratory, some twelve by twenty feet, and one side of which represents the prescription case.

This is the general plan of most drug stores, the prescription case dividing the store room proper from the back room or laboratory.

If the laboratory can be a separate room, so much the better.

Should your space be such that a



LABORATORY FLOOR PLAN.

- R.—Table.
- A.—Stove.
- B. B. B.—Shelves for fluid extracts, ointments, etc.
- C.—Shelves for empty prescription bottles.
- D. D.—Windows.
- E.—Door.
- F.—Cold Storage or Cellar Way.
- G.—Iron Mortar.
- H.—Drug Mill.
- I.—Shelves for stock of patents, etc.
- J.—Shelves, or Cupboards, for drugs, chemicals, etc.
- K.—Shelves for $\frac{1}{2}$ -gal. and 1-gal. bottles.
- L.—Desk.
- M.—Sink.
- N.—Shelves for paper boxes, prescription sundries, etc.
- O.—Shelves for jugs, cans, etc.
- P.—Prescription Case.

large table cannot be placed in the center, set it against the wall, but have the table.

The center, of course, is best, for then you can get at it from all sides, and this table should be about 5 ft. \times 10 ft., if your room permits such a size.

If no space is handy for a floor stove, you can place your gas, alcohol or kerosene stove on the table, closest to the prescription counter.

The space devoted to assay work and testing must not be neglected; for

sooner or later it will become a very important factor in every retail drug business.

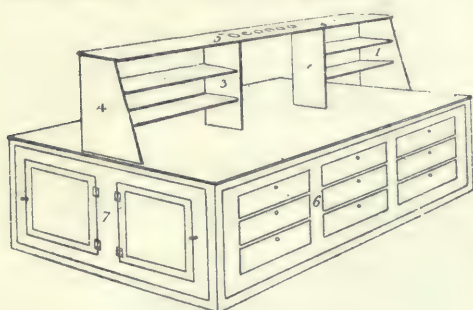
Assay Work Important.

All signs point that way, and as a pharmacist is always the final responsible party in the sale of drugs that leave his place of business, it will be an act of prudence to prepare for this coming change.

The first step has already been taken to make the druggist a more responsible party in the sale of drugs (the federal food and drugs acts), and others will soon follow.

As it takes some time to thoroughly acquaint yourself with the assay and testing processes of the pharmacopoeia, it is best to begin now and slowly increase your knowledge.

Urine analyses can also be profitably undertaken by most druggists.



LABORATORY TABLE.

- 1, 1, 3, 4.—Three feet uprights.
- 5.—Board 1 ft. x 10 ft. Six holes in center for percolators, funnels, etc.
- 6.—Drawers under table.
- 7.—Cupboards under table.

If 6 and 7 are not needed, replace with 5 heavy table legs, one being under the middle of the table.

The space between 1 and 1 can be used for four shelves instead of two and is to be fitted up for assay work and testing.

The cold storage cupboard mentioned in the plan is for the purpose of storing volatile oils, ointments, syrups and soda fountain necessities, etc.

It is as much for keeping numerous preparations in the dark as for keeping them cool, and its place will be taken by the cellar if such a luxury is found in your place of business.

There are numerous medicines which should be kept in the dark, according

to pharmacopoeial directions, and by following these directions you will avoid many unpleasant experiences in compounding and manufacturing.

In towns that have no water works, a good sized wash tub mounted on a substantial stand may be used in place of a sink. This often proves convenient for mixing condition powders, etc.

All the space left can be used for shelving and drawers or cupboards.

Kinds of Apparatus Necessary.

The apparatus for a laboratory for the average druggist would include the following, in addition to the furniture:

One 1-gal. and one ½-gal. percolator; three ribbed funnels, 1-pint, 2-pint, and ½-gal.; one drug mill; one 1-gal. iron mortar; one ½-gal. evaporating dish; one ½-gal. covered granite casserole, one of the handiest vessels imaginable, for infusions, melting fats, heating syrups, etc.; gas, alcohol, kerosene, or wood stove; water bath; tincture press; counter scales, with avoirdupois, troy and metric weights; a strainer frame, about one foot square and mounted on four legs, or large enough so it can be laid on your funnel; one or more graduated bottles.

These, in addition to your prescription utensils, as graduates, mortars, spatulas, pill and tablet machines, filter paper, etc., and your assay and testing apparatus, will complete the list.

CHAPTER VII.

While the manufacturer of the various official preparations offers no hardship to the trained druggist with proper utensils, one class of preparation calls for special comment.

The process of manufacture and subsequent preservation of syrups has been a stumbling block to many an otherwise capable and conscientious pharmacist.

Why? Principally because the sugar was not U. S. P. standard.

Other reasons, of course, exist, as making the syrup a little too thin, or a little too heavy, using unclean vessels, etc.

Moral Courage.

You have doubtless consigned to the waste pipe or sink many syrups that have soured, and for this you are to be commended, showing that you firmly believe in the correct principle, that a spoiled syrup cannot be made right by "reboiling."

But there is absolutely no need of a single syrup spoiling if you make it right and keep it right.

Besides all the other reasons why a syrup should be exactly right, have you ever realized what irreparable harm can come to a little baby who swallows some of a partly fermented syrup?

In the first place, satisfy yourself that the sugar is of U. S. P. purity.

Eight times out of nine it is impure, and this impurity has become more noticeable since beet sugar has come on the market.

Most of the beet sugar makes a dirty looking syrup, and most of the cane sugar, when made into syrup by cold percolation, deposits the insoluble blue or gray coloring matter used to make a yellowish sugar look white.

Now by using only cane sugar, and boiling your syrup you avoid most of your troubles.

How to Make Syrup.

Boil your syrup this way: Heat the distilled water to boiling and then add the sugar, and as soon as it boils skim off the scum and remove from the fire.

Adding the sugar when the water boils, and not before, prevents the objectionable dark color, due to the prolonged exposure of the sugar to heat, causing a slight caramelization.

The scum represents the decomposition products of the coloring, and if all is carefully removed before straining, you will have a very pure syrup.

Buy your sugar in 100 lb. bags, or by the barrel, and have it guaranteed "cane sugar." Keep it clean and free from dampness.

Test your sugar according to the test described in the U. S. P. You may be surprised at the revelations thereof, and discover for once why this, that and the other thing happened to your syrups.

Use the Pharmacopoeia.

Do not be afraid to use your Pharmacopoeia. It is the best book you have, your truest friend, and the more you use it the better you will like it.

It is self-evident that you must sometime get this fact, "the following of pharmacopoeial directions," thoroughly drummed into you, if you ever expect to conduct a first-class drug store.

The makers and revisers of this book have done more for you in giving you these instructions than you have any idea of, and the more you profit by their conclusions, the more of a success you will be.

If your syrups are made exactly right and the following cautions well noted, you will always have good syrups:

(1) Make as little as possible, according to your want.

(2) Keep them in ordinary packing bottles and in a cool place.

(3) Cork all syrup bottles with rubber stoppers.

Mucilage of Acacia is another old time offender that will not stay sweet, unless extra precautions are taken.

As it is often used in injections, you must be very particular to keep it in a cold place at all times.

Presentable Appearances.

Infusion of Digitalis affords a good example of how a perfectly clear aqueous liquid retards fermentation, or "souring."

If this infusion is filtered when cold it will keep active for at least six months.

In fact, if cleanliness and clarifying were practiced upon every possible occasion, few preparations would spoil, and finished prescriptions would have a more presentable appearance.

Departure from Standard Excusable.

Another official preparation, with which countless liberties are taken, mostly unnecessary ones, is the Solution of Magnesium Citrate.

First of all you are "ordered to make it fresh when wanted," but it seems to be the rule that enough is generally

made to last from three to six days and possibly longer.

It becomes imperative to "keep it just right," therefore, in order that it may be "fresh when sold."

This transgression of the instructions of the Pharmacopoeia is probably excusable if the preparation is kept right, which is in a cold place, and for not longer than seven days.

One important addition, however, that could be made to render it more pleasing to the taste is the addition of two drams of tincture of ginger to one quart of syrup of citric acid, and of this the revision committee of the U. S. P. might make note.

This seems to remove perfectly any disagreeable taste and griping of which so many people complain.

The Wrong Way to Cut Down Expenses.

The two following U. S. P. Preparations may teach you something:

Spir. Menthae pip., 1000 Cc.

Oil Peppermint	100 Cc...	\$0.45
Peppermint herb	10 Gm...	.01
Alcohol	ad 1,000 Cc...	.75

Cost\$1.21

Cost per pint, 57c, or very nearly 4c per ounce. Why do you sell this at 5c per ounce?

This preparation illustrates very forcibly why some druggists and some manufacturers can sell cheaper than others.

The inclination to cut down a little on the oil, and to replace some of the alcohol with water is great, but moral courage, brothers, is needed in your profession.

Some large manufacturers use as one of their "stock" arguments that a preparation can be made more scientific and exact by making large quantities at a time.

You can well afford to doubt this, and furthermore the greater the quantity the greater the inclination to "cut down" expensive ingredients.

Be honest, for it pays; besides, a drug inspector may call upon you any day.

Spiritus Aetheris Nitrosi, U. S. P.

Ethyl nitrite—by U. S. P. process	1 oz. av.	\$0.06
Alcohol	21 oz. av.	.50

22 oz. av., or 26 fl. oz., cost.....\$0.56

Cost per pint, 35c. Cost from manufacturer, 52c to 89c.

Next time when you prepare this (never buy it) turn to page 414, U. S. P., see what shall be done with it as regards storage, and then do it.

How Physicians Lose Faith.

You have probably never done this before, and as a result many physicians have lost faith in one of the most esteemed of medicines.

Keep your sweet spirits of nitre in 4 oz. dark amber colored bottles, well corked, in a cool place, and never on your regular tincture selving.

Also bear in mind there is no such a thing in the U. S. P. as Spirits Nitre, 3 f., or 4 f.—nor Aqua Ammonia 3 f. and 4 f.

CHAPTER VIII.

Every druggist knows the importance of having a refilled prescription look and taste exactly like the original.

It happens very frequently, however, that a "refill" looks or tastes entirely different to what a customer has been accustomed to get.

What then? The first thing that flashes through the customer's mind is: "The druggist has made a mistake." Now you know that generally means loss of custom and loss of professional reputation, besides how it hurts to have it said about you, "He can't be trusted or depended upon."

However blameless you may be, however good your excuses, nothing helps you. You did not make it the same, you must suffer the consequences, and all for the want of a little system.

How Custom Is Lost.

To illustrate: You have filled a prescription several times containing Ammonium chloride, Codeine sulphate and Syrup of Licorice.

Now you have just lately engaged a new clerk. It's your day off, and this prescription comes in to be re-filled.

The Syrup of Licorice bottle is empty (strange how these things all happen at the same time), but as the clerk is in a hurry, he makes it quickly from the fluid extract, according to the "formula on the bottle."

You, of course, have always made your Syrup of Licorice according to the N. F., and when you put up the prescription it looked thick and not at all transparent, while—this time it is a thinner liquid, much lighter in color and transparent and tastes much more salty.

Now this same thing is liable to happen with many preparations that are not official in either the U. S. P. or the N. F., and for this reason you should have a laboratory journal.

Need of a Laboratory Journal.

This journal must be made very complete and its use should be one of the first instructions to your new clerk.

It will tell you how much of a preparation you use in the course of a certain length of time, how it should look, etc.

A glance at the tabulator herewith will show its value and necessity.

An index at the beginning of the journal is of assistance, as the contents will not be in alphabetical order, and a full page should be allowed for each preparation.

Such preparations as are only made once or possibly twice, and are very seldom called for, need not be entered into the journal.

A Laboratory Want List.

A necessary and valuable addition to this journal is a "Laboratory want list" placed in the most convenient part of the room.

On this list you must place "at

ARTICLE.	DATE OF WANT. FACTURE.	AMOUNT MADE.	LOSS.	PROCESS.	ADDITION.	LOCATION FORMULA.	COST.	REMARKS.
Tt. Arnica.	Jan. 28, '06	½ gallon.	0	percolation.	0	U. S. P. p. 465.	96c.	finish process with water.
	Mar. 22, '06	½ gallon.	9-oz. alcohol.	maceration.	0	"	\$1.14	process faulty.
	May 19, '06	1 gallon.	0	percolation.	0	"	\$1.87	finish process with water.
Bay Rum.	June 12, '06	1 gallon.	4 ounce.	maceration with pepper pulp filter.	10 grains currants to each gallon.	N. F. III, page 226.	\$2.10	macerate one month.
	Aug. 21, '06	3 gallons.	0	"	"	" with changes.	\$5.30	macerate two weeks.
Cough Syrup.	Oct. 11, '06	3 gallons.	1 broke	follow formula exactly.	0	Special formula book page 17.	77c. gal. 3-oz. bottle finished 8½c.	Sell 16 oz. for \$1 when wanted.
		66 6-oz. bottles.	3 broke.				6-oz. bottle finished 6c.	

once" every article, the container of which is becoming empty, or some work that needs attention.

The following sample list will illustrate its usefulness:

Tincture chloride iron.
 Elix. aromatic.
 Corn Cure.
 Seidlitz Powders.
 Filter Elixir Calisaya Dec. 1.
 5c packages Epsom Salts.
 Filter red show globe color.
 Percolate Vanilla extract March 1.

This is fully as important as your other want list and is a check upon the customary hurry in making things and a guard against "being out of it."

The following preparation causes considerable trouble in one way or another, and this can easily be obviated by being careful as to the details.

Hoffman's Drops and Hoffman's Anodyne.

We have in the U. S. P. a Spirit of Ether and a Compound Spirit of Ether—the former is generally sold under the name of Hoffman's Drops and the latter is but very seldom sold, and is the genuine Hoffman's Anodyne. Selling the simple Spirit of Ether when Hoffman's Anodyne is called for, has caused some legal complications in which the druggist always has come out second best.

The reprehensible practice of replacing a large part of the alcohol with water in the simple spirit, as practiced by some druggists, is to be condemned.

This spirit is of but little use therapeutically, and is rendered almost valueless by adulteration with water. It should be dropped from the pharmacopoeia.

The Compound Spirit of Ether should be the only official one and if properly prepared, is one of the most useful anodyne and antispasmodic medicines in the materia medica.

But because it has been so sadly neglected, it is now but seldom prescribed, and the druggist has no one but himself to blame for the hundreds of anodyne and hypnotic chemicals that find preferred places on his prescription case.

You have Veronal, Pyramidon, Apyrexine, Antiseptin, Bromipin, Chloralamid, Hypnon, Trional, Sulphonal, Malium, Urethan, and hundreds of others, costing all the way from 50c to \$2.15 per oz.

Hoffman's Anodyne will not replace all of these, but many of them would not today be in your stock if your physicians would have had a genuine Compound Spirits of Ether to prescribe.

The cost of Hoffman's anodyne is \$1.20 per pint, as follows:

Ether	325 Cc.	\$0.18
Alcohol	650 Cc.	.51
Ethereal Oil.....	25 Cc.	1.80

1,000 Cc. cost.....\$2.49

It is a good preparation to talk about with your physician, and possibly by combining with it Asafetida, Valerian or other drugs and making the mixture palatable, you may succeed in preparing a very useful and effective medicine for the physician.

The Ethereal Oil must be genuine, U. S. P., nothing else will do.

CHAPTER IX.

Can you guarantee the purity of every drug and chemical you sell? Probably not, but it is your duty to find out what you are getting and paying for.

Selling Pure Drugs.

The reason we have so many impure, cheap and adulterated drugs is because you have been content to keep and sell what has been sent you by the wholesaler.

Now the time is coming, in fact it is here already, when it will be **you** who will have to give an account of the nature and quality of the medicines that you are selling.

You will have quite an educational campaign to go through with, to be sure, in inspecting your drugs as you receive them, with the aid of the Pharmacopoeia and Dispensatory, but as the work is comparatively easy and shows in increased profits from its beginning, you will not begrudge this campaign's opportunities.

Using College Training

Besides this, you are now going to put into effect some of the things you learned in college and paid for dearly.

Do you know that the beeswax you generally buy is no beeswax at all, especially the kind you buy at 5c a cake, 16 to the pound, light in weight and light in color and consisting mostly of paraffine? It is probably all right for ironing, etc., but it is not the beeswax you ordered and are going to pay for.

Do you know that your tannic acid is

often adulterated with flour and starch; your "pure" creosote with carbolic acid; cream of tartar with alum, starch or plaster of paris, etc.?

Your list will be a long one. Even such expensive drugs and chemicals as vanillin, essential oils, etc., are not beyond suspicion, and many drugs, important ones, too, have fallen into disuse on account of adulteration.

This adulteration or poor quality is largely your fault, for you have been absolutely indifferent as to quality, and the physician, probably unsuspecting the real cause and getting no results or but indifferent ones, naturally quits the drug and begins to use another.

Important Drugs Neglected.

Examples of this we find in Araroba, Asafoetida, Cantharides, Cascarilla, Lobelia, Cascara Sagrada, etc.

Take Asafoetida, a very important drug, and how often is it prescribed? Very seldom now. You pay 20, 30 and 35c per pound for it, yet good Asafoetida cannot be put on a camel's back in Persia for that price, so you may imagine how it is adulterated by the time it reaches you.

During 1909 it more than doubled in price, but the quality did not improve in proportion.

You will find that the time will soon come when you will get \$1.00 for many drugs and prescriptions where you are getting 50c now. This will be when pharmacists do their duty by seeing that nothing but pure, standard goods get into their prescription stocks.

A few years ago, when you made Tincture of Opium by the 1890 U. S. P. process, what trouble you had, how slow it filtered and how put out you were with the compilers of the Pharmacopoeia for giving you such a formula. But the trouble was not with the formula; it lay in the fact that your Calcium Phosphate was adulterated with about 33 per cent of Calcium Carbonate.

Vanilline makes a fine flavor, developing greatly in a few months, but the imitation, mostly acetanilid, has always given you a poor flavor.

Many of your essential oils are more or less adulterated and you must exercise the greatest care in dealing with a firm that is reliable, and even then you should test them occasionally.

You have probably never had the pleasure of smelling a genuine Oil of Orange, except from handling the fruit, and this fresh fruit odor should have cautioned you that the oil in the bottle is not true to its name.

Gum Arabic in emulsions has given you much trouble. Try the pure gum and note the difference.

Inspection Is Easy.

These few examples should teach you the necessity for becoming proficient in at least the rudiments of testing and analyzing, and for actually being what you profess to be—a druggist who can and will guarantee the quality of his wares.

Don't give any one a chance to sell you inferior or adulterated goods, and soon there will be none such offered for sale.

Now, to assure yourself of the practicability of testing and the ease with which you can do it, examine all the ingredients in the two following preparations and discover why they have given you trouble.

First, take Cresol and turn to page 119 of the Pharmacopoeia. If your Cresol stands all the simple tests given and which every druggist can apply in less than 30 minutes' time, your Cresol is right; if it is defective, return it.

When you have finished this rudimentary testing you will come to the conclusion that the Pharmacopoeia is a pretty good "druggist's bible," and that its teachings, if followed, will eventually make a genuine pharmacist of you and keep you out of trouble, both pharmaceutical and legal.

1. Ung. Aqua Rosae, U. S. P., 1,000 Gm.

Spermaceti,	125 Gm.	\$.010
White Wax	120 Gm.	.08
Exp. Oil Almond	560 Gm.	.85
Sodium Borate	5 Gm.	.01
Stronger Rose Water	190 Gm.	.13

Cost\$1.17

Being 53c per pound. What do you pay for cold cream made from mineral oil?

By mixing the aqueous and oil solutions hot instead of warm, and using an ordinary egg beater for thorough incorporation, you produce a much more elegant preparation, fluffy, foamy and light.

Cold cream must never be put up in tin ointment boxes, for in a very short time the tin rusts and discolors the ointment.

2. Liquor Cresolis Comp., U. S. P., 1,000 Gm.

Cresol	500 Gm..	\$0.27
Linseed oil	350 Gm..	.06
Potass. Hydroxide	80 Gm..	.06
Water q. s.—ad.....	1,000 Gm..	.00

Cost\$0.39

Cost per pint, 18c. Cost when purchased from 40c to 65c.

Cost of the numerous secret preparations ranges from 67c to 97c per pint.

This preparation has caused more trouble and comment than any other in the Pharmacopoeia. When your preparation produces a milky appearing mixture with water, it shows that your saponification is incomplete, either from using poor material or through faulty manipulation.

The process of manufacture should include heat, as nothing induces such thorough saponification as heat; it is simply a process of rendering Cresol more soluble by the addition of soft soap, producing, in addition to a useful antiseptic, a thorough cleanser.

The addition of 3 per cent alcohol will also prove of value to this preparation.

Another mistake that many are liable to make in preparations of this kind is to mistake Gm. for Cc. and measuring the ingredients where they should be weighed. 350 Gm. Linseed Oil measure about 376 Cc., being lighter than water. 500 Gm. Cresol measure only 484 Cc., being heavier than water. Dividing the weight by the specific gravity, gives the measure.

Multiplying the measure by the specific gravity, gives the weight.

CHAPTER X.

"I know it is pure for I have tested it." Any pharmacist who makes frequent opportunities to use this phrase, certainly feels himself master of his profession.

That it is essential we all know, but very few know it to be an easy task, having the impression that testing and assaying require a big room, much expensive apparatus, and a high degree of training and skill.

Whatever it really is, however, we hope every reader of this book will follow the writer patiently and decide for themselves whether it is possible for an ordinary druggist to find time for it.

If you as a pharmacist are to depend upon the wholesale houses for the purity and quality of your crude and powdered drugs, you have no claim to other public recognition than may be fairly claimed by grocers and others and are upon precisely the same footing.

Don't Be Afraid of a Shadow.

From a purely economic point of view it will be a distinct advantage to you to be able to apply botanical and chemical knowledge to your daily business.

Do not be frightened at these words, a mere shadow—the reality, the actual finding out, the testing, is a profit maker.

You buy a 5-gallon jug of wine and you use some of it for making Essence of Pepsin. In a short time you notice that your Essence has a peculiar sour odor and you don't know what causes the trouble.

You were particular to make it just exactly according to the formula, but it seems to have gone back on you.

Your Essence has fermented and has become a poison to a sick stomach instead of a therapeutic agent, and all on account of your wine being adulterated.

This occurs sooner in Pepsin prepa-

rations than in most others, on account of the nature of Pepsin.

Why Essence Pepsin Sours.

Your wine, according to the Pharmacopoeia, page 500, should contain from $8\frac{1}{2}$ to 15 per cent Alcohol by volume. The three test solutions necessary will be found on pages 519, 552 and 526 respectively.

As your wine may be adulterated with several of many possible admixtures it is almost impossible to say which of these has spoiled your Essence and why.

Ordinarily the Alcohol present in the Essence, (without considering the Wine,) and the glycerin, would be sufficient to preserve it, but as it will often ferment, this must be laid to the fact that almost no alcohol is found in the wine, or that an adulterant causes the mischief.

By being careful with the Potassium Hydroxide test, you will very likely discover that it will take 10Cc or even more for neutralization, showing that an acid has been added, most likely sulphuric acid or vinegar.

So when you hear of wine merchants buying large quantities of sulphuric acid or vinegar, you may know what is done with it.

The first test will tell you, by the large weight of the residue how much caramel or coloring has been added to get the rich color, or sugar for a sweetener.

These tests are all very simple and can be made by anyone that is capable of putting up prescriptions.

The result of your testing this wine will probably be a return of the 5-gallon jug to the seller, unless the operation of the Pure Food and Drug Law affects him, and your wholesale drug-gist is very likely to send a U. S. P. wine, if you specify such on your order.

Gum Benzoin Troubles.

When you buy a pound of sugar for 6c and you find "sand" in it you feel imposed upon, and when you purchase a yard of cloth for 9c to cover a 36-inch surface, and your cloth lacks 1 inch of covering it, you call the dry

goods man a fraud and a cheat.

But when you purchase a pound of gum benzoin for 50c, make the official tincture with it and one-third or one-half of it remains on the filter undissolved, you will not say one word about adulteration, cheating, etc. Why?

Is it of no consequence that you have paid about 20c for earthy admixture? Is it of no consequence that when you sell the tincture it is about 35 per cent below standard? Is it of no consequence to you whether your customer uses three drops or ten drops in her basin of water, to get the proper milkiness?

This will probably have no ill effects on anyone's health, but it shows how easy it is for you to prepare a "below standard" preparation, when you do not watch your purchases.

In this case testing is unnecessary, as Benzoin should dissolve completely in the alcohol, with the exception of small amounts of bark or vegetable tissue.

Tr. Benzoin in amounts of one quart or less can be made in 3 hours time if the bottle containing the ingredients is placed in a very warm place, corking loosely and shaking it often. The loss of Alcohol by evaporation in this method is very insignificant, amounting to less than half an ounce in a quart.

The Pharmacopoeia Tells.

Of very much assistance in locating adulterations, testing and helping you to understand your preparations better, is to read every word of the description of the drug and the preparation you are making, not only in the Pharmacopoeia, but also in the Dispensatory.

This not only refreshes your mind and causes mental growth, but is food for your mind, which needs food as much as your stomach.

You have often had trouble with sweet spirits of nitre when you put up a prescription containing it; it effervesces with some of your ingredients in the mortar, it causes the mixture in

the bottle to foam up and pop, and it has even caused explosions after the bottle was corked.

You thought this was natural and had to be so, but it is not. Your spirit is acid, as you will discover by testing it and this is what causes the trouble. Keep it right and it will not become acid.

For preserving this preparation see in Chapter VII of this book; U. S. P., page 414; National Dispensatory, pages 1434 and 1437; U. S. Dispensatory, page 1169.

Facts About Ether.

Ether is a very important medicine, even outside of its use as an anesthetic. The Pharmacopoeia says it shall contain 96 per cent by weight of absolute Ether and 4 per cent of alcohol, containing a little water.

It is on the market containing as high as 40 per cent of alcohol and you have been using it and did not know it.

The very simple test to discover this fraud, as given on page 31, U. S. P., should convince you that testing pays. It is also important to know that one pound of Ether measures about 21 fluid ounces, and one pint of it weighs about 12 oz. av. When next you purchase Ether find out what and how much you are getting.

In Chapter IV of this volume reference was made to the price of Magma Magnesiae, N. F., as 22c per quart. As water is notoriously bad in many places, we used distilled water, and naturally had to charge for it.

Another plan would be to use ordinary water, add 2 grains of alum per gallon and after standing about 4 hours filtering it. This will reduce the actual cost to 7c a quart.

We mention this here because in testing various brands of Epsom salts, it will be found that some brands are more difficult of hydration than others, and that the N. F. formula is faulty for the reason that the product produced is too thick for ordinary bottle dispensing.

Improving an N. F. Formula.

In all processes similar to the one for making this preparation, the more

dilute the solutions the lighter the precipitate and the greater its bulk.

Now, if these solutions were reduced to one quarter, or better still, to one eighth of what the formula calls for, using instead of 4,000 Cc only 500 Cc, the precipitate would be much heavier, occupy less space and the finished preparation is easily poured from one bottle to another.

The amount of Sodium Hydroxide could also be increased to at least half of the amount of the Magnesium Sulphate, for the same reason, namely, to make the precipitate heavier.

There are many of these N. F. preparations that might possibly be improved and the author would recommend that whenever pharmacists experience difficulty in making an A No. 1 preparation, that they confer with the N. F. committee on revision in regard to same.

CHAPTER XI.

When a customer tells you he can buy 3 oz. Hoffman's Drops for 10c from a competitor or a cut-rate drug store, and Tincture of Iodine or Tincture of Iron at 5c an ounce, what would you do?

You know that the first act of a dishonest drug store proprietor who would take trade from his druggist competitor is to cut the price, and the next step is to cut the quality, for after the price is cut he sees no reason why you should give the genuine article at the cut-price.

Show Your Superiority.

Your answer to the customer would therefore be to have him bring you some of the preparations he can buy so cheaply and that you will analyze them for him and see why they are sold at such a low price.

The trouble with Hoffman's Drops will be that most of the alcohol has been replaced with water and some of the ether left out altogether. As the specific gravity of genuine Spiritus Aetheris is about .78, the simple act of taking the specific gravity will uncover the fraud, for the greater the amount of water added as an adulter-

ant, the higher the specific gravity will mount towards 1.00.

Tincture of Iodine may be very weak in Iodine, and this is readily discovered by the pharmacopoeial test as given on page 469 of the U. S. P., the volumetric test solution being found on page 563.

It will be policy to become thoroughly familiar with the method of making volumetric solutions as described on pages 544-546, the reagents, pages 517-541, and the indicators, pages 541-544.

When tincture of iron is adulterated it will be found that the greater part of the alcohol has been replaced by water, and the agreeable ethereal odor is missing altogether, and the higher specific gravity also proves the fact. Its specific gravity should be 1.005.

A little missionary work like this will prove to your customers that their wants will be properly cared for in your store, and when this fact is once known, people will go by several drug stores to come to yours, that is, all such as are not perpetually after bargains and cheapness.

Medicines Must Be Uniform.

There is no good reason why substances used in medicine shall not be exactly alike at all times, in regard to medicinal activity by the time the patient gets the dose, and when all our official drugs and preparations can be depended upon by the physician to do just what he expects they will and ought to do, we will have virtually killed off the present monstrous secret nostrum business.

So whenever you are making your simple tests and discover that some of your purchases are true to label and some are not, you are virtually putting money in your bank which will some day bring a high rate of interest.

That drugs and medicines are adulterated to a large extent is abundantly proven by the fact that the passage of the Pure Food and Drugs Law was almost compulsory, and while the federal authorities will do their best to see that no impure drugs come into this country or are shipped from one

state to another, they cannot do it all.

You are held responsible for what you sell, both morally and legally.

A recent Baltimore case when 50 barrels of liquor branded Bourbon whiskey were seized by federal officers, were found to be composed of the refuse of sugar refineries, treated with sulphuric acid, ammonia, coloring matter and flavoring agents.

The manufacturers of course were convicted—however, if some of this same stuff had found its way into your store and an inspector had made an analysis of it, you would have spent a good many unpleasant days in conferring with the federal authorities, and the outcome of such matters is not pleasant to contemplate.

Pure Cinnamon is Important.

Cinnamon is an important drug and is a very useful remedy in the treatment of nausea and vomiting, flatulent colic and serous diarrhoea, being a reliable carminative and intestinal anti-septic.

When you make your tincture from powdered cinnamon as purchased in the open market, the chances are that your preparation will have none of the above mentioned medical properties.

Tincture of cinnamon is not made from powdered cinnamon for this very reason, as it is next to impossible to purchase pure powdered cinnamon, exporters not even pretending to supply it as ground Cinnamon.

In making any U. S. P. or N. F. preparations, requiring cinnamon, it is well to bear this fact in mind.

In the manufacture of the Compound Tincture of Viburnum, N. F., this is of the greatest consequence, and if you will take your Cinnamon quills and compare them with the official description on page 105 of the U. S. P., you will be able to see whether you have a genuine Cinnamon. If you have, powder it yourself.

Actually Reliable.

The same suggestion holds good with Cloves, and also the other ingredients of this preparation. Grind them up in your own mill and then when

your tincture is finished, you can guarantee it exactly true to formula, with no guess work at any stage of the process, true in color, taste, odor and action.

Tinct. Viburni Opuhi Comp. N. F. 32
fl. oz.

Viburnum opulus	1 oz....	\$0.02
Dioscorea	1 oz....	.02
Scullycap	145 gr....	.01
Cloves	1½ oz....	.03
Cinnamon	2 oz....	.06
Glycerin	2 fl.oz....	.03
Alcohol,		
Water, aa..q.s..ad..	32 fl.oz....	.73

Cost per quart\$0.90

Being 45c per pint. Purchased from the manufacturer this costs from 70c up to as high as 95c per pint, while the various preparations of a similar nature parading as secret "specialties" cost as high as \$1.50 per pint.

Syrupus Glycyrrhizae, N. F.

Pure extract licorice ..	4 oz. tr....	\$0.15
Glycerin	4 oz. tr....	.03
Sugar	20 oz. tr....	.09
Water	q. s. 32 fl.oz....	.00

Cost per quart\$0.27

It seems to be the universal practice, for some unexplainable reason that druggists make this syrup with the powdered extract of licorice, and consequently most of them have a syrup that is forever giving them trouble; it sours, it precipitates, it foams and makes manipulation very difficult.

The formula calls for pure extract of licorice, U. S. P., an extract in the form of a soft mass and completely soluble in water and of a very agreeable and sweetish taste.

A Universal Mistake.

The so-called powdered extract is very impure, not very soluble in water, and is adulterated very largely with starch, and the process of drying it in order that it may be reduced to the powdered form also assists in rendering it insoluble.

Generally this powdered extract has a very acrid taste, and it is never fit for use in pharmaceutical preparations.

These remarks also apply to the

manufacture of Mistura Glycyrrhizae Composita, U. S. P., the much used Brown Mixture, and which in consequence of the use of this powdered extract, always has an objectionable precipitate and an appearance and taste entirely foreign to the genuine article.

Buy only the pure licorice extract of the U. S. P., and your licorice troubles will be a thing of the past, and your preparations will have a much nicer taste and appearance.

CHAPTER XII.

A very important preparation in the Pharmacopoeia and probably the cheapest one, is Lime Water, Liquor Calcis.

Yet how many druggists can positively state that their lime water is strictly U. S. P., when tested by the simple processes given on page 260 of the Pharmacopoeia?

As it is used almost entirely as an antacid for infants, you will realize that it needs careful attention, and the reprehensible practice of some lazy druggists who use the same lime for years by simply adding more water to it, is to be severely condemned, as is also the foolish practice of purchasing lime tablets to be used in making this solution.

In the course of time, and where other than distilled water is used, the calcium hydroxide is changed to calcium carbonate and does not enter into solution at all.

This can be readily proven, in addition to the pharmacopoeial tests, by boiling a small quantity of it in a test tube, or by breathing into it through a small glass tube—in either case the liquid becomes turbid if the lime water still contains lime in solution.

It will bear repetition that it is not so much the harm done where poor medicine does not relieve an ailment, as the great mischief that is caused when the ailment is not checked properly, but silently and stealthily it fastens itself upon the victim unawares, when a pure, full-strength medicine would have checked it. Make medicine correctly for its own sake.

Two Simple Syrups.

Two of the simplest syrups in the Pharmacopoeia, from a manufacturing standpoint, are the syrup of Hydriodic Acid and the syrup of Ferrous Iodide, and still they are purchased very often.

Syr. Ferri Iodidi, U. S. P., 1000 Gm.
(25 fl. oz.)

Iron wire	12.5	Gm...	\$.01
Iodine	41.5	Gm...	.30
Dil. Hypophosphorous Acid	20.0	Cc....	.03
Sugar	600.0	Gm...	.08
Distilled Water q.s.	1000.0	Gm...	.01

Cost for 2 1-5 lb. would be....\$.43
or 20c per lb., and 28c per pint.

When you buy it you pay all the way from 40c to 70c per pound. Make this preparation yourself, the operation is very simple, and where the directions say "stir the mixture with a porcelain or wooden spatula" it is permissible to use a glass stirring rod.

Your own preparation will be better than any you have ever purchased.

Syr. Acidi Hydriodici, U. S. P., 1000 Gm. (28½ fl. oz.)

Dilute Hydriodic Acid	100	Gm...	\$.08
Distilled Water.....	300	Gm...	.01
Syrup	600	Gm...	.06

Cost per 2 1-5 lb.....\$.15

The price of this, 7c per lb., compares very favorably with the purchased preparation which costs, at a very cheap manufacturing concern, 35c per lb., and another kind costs \$1.04 per pound, while other prices range between these two.

In the formula above we use distilled water, which is considered a harmless improvement over the pharmacopoeial requirements of just "water."

The dilute hydriodic acid used in this syrup should be prepared by the pharmacist himself (see formula page 11, U. S. P.), and it must be preserved as there directed.

We have two waters in the Pharmacopoeia which many druggists do not keep properly, the stronger Orange Flower water and the stronger Rose Water.

These are directed to be kept loosely stoppered with a pledget of purified cotton and in a dark place, and if you do not keep them this way, they will become ropy and lose their fresh, fragrant flavor. This is a very important precaution.

Copaiba Is Adulterated.

One of our most important drugs, Copaiba, is generally more adulterant than genuine. If druggists would specify on their orders "Copaiba" or "Copaiba oleoresin," and not Balsam Copaiba, and insist upon a U. S. P. standard, the adulterations would soon disappear.

Copaiba has a distinctly specific action in certain diseases and it is your duty to dispense a U. S. P. article, otherwise your physicians cannot get the results they are looking for.

The tests on page 117, U. S. P., are all very simple and easily applied and are definite and thoroughly reliable.

We must insist that our orders be filled with genuine drugs, demanding that the wholesalers import such, for many of our drugs do need a thorough overhauling.

Oil of Bergamot.

Oil of Bergamot is generally quoted in the neighborhood of \$5.00 per lb., and this price should purchase a pure oil, and while it is not official in the U. S. P., it is much used.

Much of it is adulterated with oil of turpentine and other cheaper oils of a volatile nature and are detected in a general way by mixing the suspected sample with one-half of its volume of 90 per cent alcohol.

While a slight turbidity is permissible in the case of a very good pure bergamot oil, there should be no separation.

Oils of Cassia and Cinnamon.

A very serious error is made by many pharmacists in mistaking Oil of Cassia for Oil of Cinnamon, and vice versa. Oil of Cassia costs \$1.85 per pound, and Oil of Cinnamon costs \$1.25 per ounce, as quoted in price lists.

The error probably has its origin in the fact that some pharmacopoeias

formerly recognized *Cinnamomum Cassia* as the official drug, (some still do so), hence both names.

While the U. S. P. recognizes Oil of Cassia as official, and as this oil is distilled from the leaves, the U. S. P. product is in reality not what it should be, for this oil should be distilled from the bark.

If a fine Cinnamon water or a real Cinnamon flavor is desired, the genuine Oil of Cinnamon bark should be used, as it is much more fragrant.

Olive Oil.

Olive Oil has been and is a good seller and is probably adulterated more than any other drug of the Pharmacopoeia. In view of the recent advance in price it will probably induce unscrupulous manufacturers to adulterate it still more.

By applying the tests as given on page 320, U. S. P., you can very readily ascertain whether your purchase is what it should be. The tests are very simple.

By buying in 5-gallon quantities and bottling this oil yourself in 4 oz., 8 oz., and 16 oz. bottles, you make for yourself a great saving, and can unhesitatingly guarantee it as genuine, for you have tested it and found it so.

If you find on testing that the oil is adulterated, you must, of course, return it, otherwise you might come in conflict with the Pure Food and Drug Act, and that means litigation.

CHAPTER XIII.

The pharmacist who boasts of having a perfect Aromatic Elixir, true as to formula, purity and flavor, certainly has something to be proud of.

The mistaken notion seems to have possession of many pharmacists that only expensive or very powerful drugs need care and skill in their preparation, for fear of a money loss or for fear of a poisoning accident.

This is all wrong and does an injustice to your better judgment, for he who is careful in small and insignificant things cannot help but be careful in all things.

A Most Useful Preparation.

Aromatic Elixir is one of the most useful as well as most frequently prescribed preparations of the Pharmacopoeia, and as a physician cannot at any time do his patients justice unless he has the very best of preparations, it devolves upon us to see that they are right.

Elixir Aromaticum, U. S. P., 1 gallon:

Compound Spirit of Orange	12 drams	.10
Alcohol	32 fl. oz.	.68
Syrup	48 fl. oz.	.16
Talc. purified	2 oz.	.02
Distilled water	q. s. ad 1 gallon	.06

Cost to make one gallon.....\$1.02

Manufacturing houses charge as high as \$3.00 per gallon for this elixir. The directions as stated in the Pharmacopoeia, if supplemented by the statement, "Allow to stand one week or longer before filtration," will yield a very clear, brilliant filtrate and which will also run through the filter more quickly. Upon the character of the Compound Spirit of Orange depends the flavor of the elixir.

Testing the Oils of Orange and Lemon.

Oil of orange, peel as purchased in the open market is of every possible grade, and while the Pharmacopoeial tests are of somewhat difficult application as regards the detection of oil of turpentine as an adulterant, you should insist that your jobber label your purchase U. S. P.

By comparing your purchase with the flavor of an orange (the fruit) which you know does contain the genuine oil, you can arrive at a very satisfactory conclusion as regards the purity of your purchase.

The same process can be applied in the case of oil of lemon and in either case the least faint suggestion of a terebinthinate odor should condemn the oil.

You cannot make an excellent Aromatic Elixir unless you have absolutely pure oils to begin with.

Mistura Chlorali et Potassii Bromidi Composita, N. F., 32 fl. oz.:

Hydrated Chloral	6 oz. tr.	.65
Potassium Bromide	6 oz. tr.	.18

Ext. Indian Cannabis	30 gr. ....	.08
Ext. Hyoscyamus	30 gr. ....	.02
Pumice	300 gr. ....	.01
Water	q. s. ad. ....	.32 fl. oz. .00

Cost per quart\$0.89

When the cost of this preparation is compared with the price of the numerous secret specialties that parade as hypnotic cure-alls, etc., that often sell for as high as 17c to 20c per ounce at wholesale, it simply drives another nail into the coffin of the departing secrets.

If the directions accompanying this N. F. preparation should yield more than only a small cloudiness or a faint precipitate, operate as follows: Dissolve the extracts in a very concentrated solution of the Chloral Hydrate, and then add the Potassium Bromide dissolved in the balance of the water.

This will generally produce a clear, brilliant preparation, when filtered after standing a few days.

While Chloral Hydrate of good quality is generally found on the market, the simple tests of the Pharmacopoeia should be gone through with, especially that one relating to chloral alcoholate.

Wax and Vanillin Adulterated.

Wax, both yellow and white, is very frequently adulterated with paraffin, rosin, etc., and as long as pharmacists must pay the high price of 45c per pound, there is no need of accepting anything but the genuine article; paraffin costs only, at most, 12c per pound. The pharmacopoeial tests on page 93 are a reliable means to guard against the purchasing of false or misbranded wax.

Vanillin is very largely used as a flavoring agent and is really a valuable chemical for this purpose. The extensive adulterations to which it is subject, however, has in many instances resulted in its being cast aside, needlessly so, for other flavoring agents.

The simple tests of the Pharmacopoeia, as found on page 498, are a sufficient guard against buying adulterated vanillin.

The adulterants are generally coumarin flavored acetanilid, cheap benzoic acid and even boric acid.

CHAPTER XIV.

As a supplementary to the simple testing processes of the Pharmacopoeia may be mentioned the fact that many vegetable drugs need garbling, thorough cleansing and a general inspection before being offered for sale.

Nearly all seeds are accompanied by an abundance of dirt which sifting will remove, and this work must be done for much harm is liable to be done in infants and children, who are generally the greatest consumers of drugs that are habitually brought to market in an unclean condition.

Such drugs are Anise, Senna, Fennel, Irish and Iceland moss, etc., and this garbling process was probably the first primitive process of standardization. Wormy drugs of vegetable origin, which have absolutely no medicinal value, should be burnt up. Selling them adds nothing to your reputation and has been the means of driving away numerous customers from stores where they have been sold.

Practical Value Again Illustrated.

The practical value of laboratory experience and the ability to do things to avoid loss, is illustrated in the following occurrence: A druggist had occasion to buy sulphate of quinine in considerable quantities in one ounce bottles. Two dozen of these bottles were temporarily set on the floor and the accidental falling upon them of an iron pestle broke 15 bottles, quinine and broken glass were hopelessly mixed and of course rendering the quinine useless and valueless.

However, the quinine was dissolved out of the mixture by following the simple directions on page 1285 of the National Standard Dispensatory, using cold distilled water one gallon and enough sulphuric acid to affect solution.

The quinine was then precipitated with ammonia water and the mixture was allowed to stand for one week that

the amorphous quinine might become hydrated, as called for in the Pharmacopoeia. The supernatant liquid was then decanted, and the quinine washed twice with a half gallon of cold distilled water each time and then allowed to drain on a filter.

It was then spread out to dry and the result was almost 6 oz. of pure quinine alkaloid that was used up in the manufacture of the Elixir of Iron, Quinine and Strychnine phosphates, U. S. P.

Liquor Ferri peptonati cum Mangano, N. F.,
32 fl. oz.

Ferric peptonate	.....655 gr.....	\$.23
Manganese citrate, sol.	.....115 gr.....	.06
Ammonia water	.....200 m.....	.01
Aromatic Elixir	.....12½ fl. dr.....	.02
Alcohol	.....4¾ fl. oz.....	.10
Distilled Water	.....ad. 32 fl. oz.....	.04

Cost to make one quart.....\$.46

The proprietary and manufacturing houses charge for this all the way from \$1.20 to \$2.10 per quart.

This formula has been found faulty by many operators, due doubtless to the inferior quality of the iron peptonate on the market, and also of the citrate of manganese, soluble. Professor Harrison, after experimenting with various processes, that practically amounted to an exhaustion of the subject, devised a formula with full working directions.

This formula takes nothing for granted, as peptonate of iron is made during the process and also the soluble citrate of manganese. Owing to its importance it is here given in full:

Solution Iron Peptonate-Manganese.

Egg Albumen, fresh	.....125 gm.
Hydrochloric Acid U. S. P.	.....15 cc.
Pepsin U. S. P.	.....1 gm.
Sol. Ferric Chloride U. S. P.	.....60 gm.
Ammon. Hydroxide	.....10% 48 cc.
Manganese Citrate, insoluble	.....4.4 gm.
Sod. Citrate	.....25 gm.
Alcohol	.....100 cc.
Elixir Aromatic	.....100 cc.
Tincture Vanilla	.....8 cc.
Angelica Wine	.....100 cc.
Sodium Hydroxide	.....
Distilled Water	.....ad q. s. 1000 cc.

Dissolve the Egg Albumen in 2,000 cc. of distilled water to which add the pepsin previously dissolved in 480 cc. of acidulated distilled water (about 4 cc. acid to 480 cc. water), then add the remainder of the acid.

Digest at 40 Cent. for from six to twelve hours, or until the solution gives no precipitate of albumen on boiling.

The albumen must be thoroughly disintegrated and dissolved before the addition of the pepsin, which must also be in perfect solution. Strain through muslin.

Dilute the ammonium hydroxide with an equal volume of water and add the resultant solution to the solution of ferric chloride in small portions, shaking well and waiting after each addition until the precipitate which is formed is redissolved.

When all has been added, dilute to 2,000 cc. Mix the two solutions thoroughly by adding the albumen to the iron, then add slowly with constant stirring sufficient dilute sodium hydroxide solution to render the mixture faintly alkaline to sensitive litmus paper.

Transfer to a tall cylinder and allow to stand until the precipitated peptonized iron has subsided (over night); then decant off the supernatant liquid and wash repeatedly (about five times) by decantation with water as rapidly as possible and with the least exposure, or until the washings give but a faint opalescence with silver nitrate solution or no saline taste.

If during the washing the precipitate does not settle readily it shows the presence of a little acid in the water used in washing.

This should be neutralized with dilute alkali, about .04 gm. of Sodium hydroxide per 4 liters being sufficient.

Transfer to a fine muslin strainer and drain, using a slight pressure of the hands to remove all excess of water. Transfer the magma to a porcelain dish.

Dissolve the Sodium Citrate in 50 cc. of boiling water, add the Manganese Citrate; after solution is affected pour the resultant solution over the magma in the dish.

Bring to the boiling point and heat until all is dissolved. Cool and add the alcohol, aromatic elixir, tincture of vanilla, angelica wine and enough distilled water to make 1,000 cc. Filter if necessary.

This solution contains .6 per cent iron and .1 per cent manganese.

Thos. D. McElhenie uses in place of water, a 1:1000 solution of phenol, with the intention of preventing putrid odors during the process.

The process consists in making fresh peptone, by digesting albumen with pepsin as one step and making an oxychloride of iron as a second step and finally the uniting of these two to make peptonate of iron, which is then dissolved in the solution of manganese citrate.

In Dr. Squibbs' process, dry peptone and a modified solution of oxychloride of iron are used.

CHAPTER XV.

In January, 1909, active propaganda work was begun by pharmacists in behalf of U. S. P. and N. F. preparations and the three mentioned below were the ones exploited to physicians.

Liquor Antisepticus, U. S. P., Elixir Termini Hydratis eum Heroina, N. F., Elixir Ferri, Quininae et Strychninae Phosphatum, U. S. P.

A full two weeks was allowed in which to prepare these preparations be-

fore you need sample your physicians, so see that they are made "exactly right" in each and every particular.

Let the fact that you now are laying the corner-stone of an indestructible monument to pharmacy be an extra spur to your best efforts.

Quality Drugs Important.

The very first thing for you to do is to see that you have all the drugs (U. S. P. quality) necessary to make these preparations.

1.—Elixir Ferri, Quininae et Strychninae Phosphatum, U. S. P.

Soluble Ferric Phosphate.....	17.500 Gm...	.03
Quinine	8.750 Gm...	.14
Strychnine	0.275 Gm...	.02
Phosphoric Acid	2.000 Cc....	.01
Ammonium Carbonate	9.000 Gm...	.01
Alcohol	60.000 Cc....	.05
Acetic Acid	28.650 Cc....	.01
Ammonia Water,		
Distilled Water,		
Aromatic Elixir,		
each ..q. s., ad	1000.000 Cc....	.23
<hr/>		
1000 Cc., cost		\$0.50

The Modus Operandi.

Be sure you are using the alkaloids of Quinine and Strychnine and not any of the salts of these alkaloids, dissolve them in the alcohol and to this solution add the Phosphoric Acid. See that your Phosphoric Acid is the U. S. P. article, pure and 85% strength; then dilute with 350 Cc. of Aromatic Elixir. Now add the Ammonium Carbonate in translucent pieces, to the Acetic Acid, preferably in a 2-oz. graduate, and when completely dissolved, neutralize the resulting solution with Ammonia water. Aqua Ammonia, U. S. P., should contain 10% of Ammonia gas, and in view of its cheapness, it is high time that retail pharmacists are furnished with a U. S. P. article by the wholesale drug and chemical houses.

Now add enough distilled water to this neutral solution of Ammonium Acetate to make 50 Cc., and then add it to the solution of the alkaloids. To this mixture you now add enough Aromatic Elixir to measure 880 Cc.

Iron Phosphate Must Be Right.

Dissolve the Ferric Phosphate in 30 Cc. of distilled water. If your Iron Phosphate is exactly right it will dissolve very readily with the aid of a gentle heat; this solution must also be neutralized, if acid to litmus paper, using ammonia water for the purpose. When exactly neutral, add enough Aromatic Elixir to measure 120 Cc.

Finally, mix these two solutions and filter if necessary. This Elixir should have a pale greenish-yellow color, and to keep it so you must preserve it in amber colored bottles. Never keep it in the ordinary clear-glass bottles, for if you do it will darken.

The object of adding the solution of neutral Ammonium Acetate is to assist in keeping the alkaloids in solution as phosphates, without resorting to the addition of a large excess of phosphoric acid, which would accomplish the same purpose but at the expense of palatability.

The Elixir is a permanent one and if made from pure material and properly preserved, will occasion no trouble of any kind.

2.—Liquor Antisepticus, U. S. P.

Boric Acid	20.00 Gm...	.01
Benzoic Acid	1.00 Gm...	.01
Thymol	1.00 Gm...	.01
Eucalyptol .....	.25 Cc....	.01
Oil of Peppermint ....	.50 Cc....	.01
Oil of Gaultheria .....	.25 Cc....	.01
Oil of Thyme .....	.10 Cc....	.01
Alcohol	250.00 Cc....	.19
Purified Talc	20.00 Gm...	.01
Water	q. s., ad 1000.00 Cc....	.00

1000 Cc., cost \$0.27

Dissolve the Boric Acid in 700 Cc. of hot water, and cool; dissolve the Benzoic Acid in 150 Cc. of alcohol, and pour the Boric Acid solution into the Benzoic Acid solution.

Then dissolve, in a mortar of 1000 Cc. capacity, the Thymol in the Eucalyptol and the essential oils, thoroughly incorporate the purified Talc, and add, with constant stirring and trituration, the first solution.

Let stand a few days with occasional agitation, then filter, add the balance

of the alcohol (100 Cc.) and then enough water to make the finished preparation measure 1000 Cc.

When more of this preparation is to be made than can be handled in your largest mortar, the process can be finished by transferring the contents of the mortar to a bottle large enough to hold the total amount, and then adding the balance of the first solution to the contents of this bottle, instead of adding it to the contents of the mortar, shaking the bottle very frequently while doing so.

Characteristics.

This solution should be colorless, have a pleasant odor in which peppermint rather predominates while the preparation is fresh, but this predominance gradually disappears, as the odorous constituents of this preparation gradually "become acquainted with one another," or become blended.

It is important in this preparation that the **exact** amount of essential oils, Thymol and Eucalyptol be taken, no more, no less; not even one drop, otherwise few samples of this product will have the same odor.

An Excusable Pharmacopoeial Transgression.

For this reason and also in a measure on account of the "blending of odors" it would be an act of prudence and caution to prepare the following solution, the bottle for which you might label with its formula and adding thereto, "For Liquor Antisepticus, U. S. P.:"

Thymol	20 Gm.
Eucalyptol	5 Cc.
Oil Peppermint	10 Cc.
Oil Gaultheria	5 Cc.
Oil Thyme	2 Cc.
Alcohol	ad 300 Cc.

Then when 1000 Cc. of Liquor Antisepticus are to be prepared you mix 15 Cc. of this solution with the Talc, and proceed the same as in the formula, (only instead of adding 100 Cc. alcohol to the filtrate as in the formula, you add only 86 Cc., 14 Cc. of alcohol being already contained in the Thymol and oils solution).

3.—Elixir Terpini Hydratis cum Heroína.

Heroine	0.75 Gm...	.20
Elixir Terpin Hydrate 1000. Cc....		.60

Dissolve. 1000 Cc., cost \$0.80

In the manufacture of the Elixir of Terpin Hydrate, the simple directions of the National Formulary, if followed, will produce an elegant elixir.

The process consists in reducing 17.05 Gm. of Terpin Hydrate to fine powder, dissolving it in 400 Cc. of Alcohol, adding 10 Cc. of Tincture of Sweet Orange Peel, 1 Cc. of Solution of Saccharin and 400 Cc. of Glycerin; then enough Syrup is added to make the product measure 1000 Cc.

The Tincture of Sweet Orange Peel must be made strictly according to the U. S. P.; the sugar from which the syrup is made must be pure sugar, for if the ordinary unclean sugar is used in making the syrup an objectionable colored syrup is produced.

This color, which is evidence that the sugar has not been thoroughly refined, will produce a fine, brownish precipitate in the finished elixir in the course of time.

This Elixir, if made from pure drugs, is a very palatable and permanent preparation, very efficient as a therapeutic agent.

Put up a three-ounce sample of each of these three preparations, label them, and to add to the appearance, cap each with a bottle cap of pleated paper.

CHAPTER XVI.

Do not underestimate the importance of having your samples present a most finished appearance, as looks count for a good deal in sampling physicians.

Make Your Footing Sure.

In order that you may be fully prepared to answer all questions, it will be a good idea to become thoroughly familiar with preparations that are in some manner related to the three with which you are going to sample the physician.

For instance, we have Elixir Ferri, Quininae et Strychninae, N. F., made

with Sulphate of Strychnine, Hydrochloride of Quinine and Tincture of Citro-Chloride of Iron and in which the Strychnine content is only 1/100 grain per teaspoonful dose.

Then again, Elixir Ferri Pyrophosphatis, Quininae et Strychninae, N. F., is still weaker in Strychnine, containing only 1/128 grain per teaspoonful dose, and is made with Pyrophosphate of Iron, Sulphate of Quinine and the alkaloid Strychnine.

Both of these are used considerably, but neither is of such importance as the U. S. P. Elixir of the Phosphates of Iron, Quinine and Strychnine, in a therapeutic sense.

Other Similar Forms of Medication.

Many physicians may object to prescribing such bitter drugs as Quinine and Strychnine in liquid form on account of the bitter taste, and then you can recommend the Pilulae Metallosum, N. F., and these are composed of Reduced Iron, Quinine Sulphate, Strychnine and Arsenic Trioxide, two strengths of these pills being official.

Again the combination as it exists in the U. S. P. Elixir may be prescribed in pill or capsule form; you must always bear in mind that it is your province to furnish the kind, composition and palatability of the preparation, the physicians to do his own choosing as to what he will use.

Do not let the idea become fastened in your mind that the physician must be induced to prescribe the U. S. P. Elixir at any and all hazards. The idea is that, if necessary, you must call his attention to the many similar preparations official in the U. S. P. and N. F. What you are after is to prove to him that he has a well-equipped armamentarium in the official preparations as opposed to the proprietaries.

There is also official in the U. S. P., Syrupus Ferri, Quininae et Strychninae Phosphatum, containing 5 per cent Phosphoric Acid; the Strychnine contents being 1/80 grain per teaspoonful dose.

Other Standard Antiseptics.

The next sample, Liquor Antisepticus, does not have so many relations,

but physicians will ask questions and as they cannot be expected to use this antiseptic solution in each and every case, a knowledge of other official antiseptics becomes necessary.

How well our two standard authorities have provided us with these is shown by the variety of antiseptics therein given.

We have Pulvis Antisepticus, N. F., a soluble antiseptic powder, containing Salicylic and Carbolic Acids, Eucalyptol, Menthol and Thymol in small proportions, 12½ per cent Zinc Sulphate and 86.6 per cent Boric Acid, in a uniform, impalpable powder and a very efficient and valuable dry dressing.

The Compound Iodoform powder, N. F., also has its special uses in which the Iodoform odor is well masked, its composition being Iodoform 20., Boric Acid 30., Naphthalene 50., Oil Bergamot 2.5.

Further, we have official in the N. F., a deodorized Iodoform, under the title Iodoformum Aromatisatum, which is made by intimately mixing Iodoform 96. and Cumarin 4., by trituration.

Then we have the Solution of Carbolate of Sodium, N. F., containing 50 per cent Carbolic Acid, and the Compound Solution of Sodium Borate, N. F., commonly called Dobell's Solution, both very valuable antiseptics and each with its own particular purposes and uses.

The Alkaline Antiseptic Solution of the National Formulary is well known as a valuable preparation, and in Liquor Antigerminarius, N. F., we have an aromatic alcoholic germicide containing 1.6 per cent Thymol and 6 per cent each of the Oils Eucalyptus and Lavender.

Finally we have Boroglycerinum, N. F., and also a 50 per cent solution of it in Glycerin, Glyceritum Boroglycerini, U. S. P.

Helpful Suggestions.

Elixir Terpini Hydratis cum Heroína, your third sample, is in a class by itself, if we except the two similar N. F. Elixirs, Elixir of Terpin Hydrate, and the same with Codeine. These be-

long to the turpentine class of balsamic expectorants and are always effective.

Other valuable expectorant preparations, your knowledge of which may be valuable to the physician, are the Compound Elixir of Tar, N. F., containing the Syrups of Wild Cherry and Tolu, Morphine Sulphate (1/50 grain to each fluidram) and Wine of Tar.

Mistura Pectoralis, Stokes, N. F., is a very valuable preparation, containing Ammonium Carbonate, Fluidextracts of Senega and Squills, Paregoric and Syrup of Tolu.

The Compound Syrup of Irish Moss, N. F., a mild expectorant for children, is worthy of a physician's notice, and the White Pine Compound of the N. F., already has an established reputation.

The two Pharmacopoeial preparations, Syrupus Scillae Compositus and Mistura Glycyrrhizae Composita are additional evidence that our authoritative standards are well equipped with reliable preparations for assisting the physician in fighting diseases of the respiratory organs.

Making Good.

These few illustrations show the pharmacist what a wonderful fund of information is contained in the Pharmacopoeia and the National Formulary and what powerful arguments he can employ to substantiate his claim "that the use of these preparations cannot be anything but the real scientific means of combating disease." It is the actual getting back to first principles in medicine, the foundation stones of which are simplicity, honesty, known composition and strength, and reliability.

Should your position be such that you find insurmountable difficulties in the way of sampling your physicians, then delegate your clerk to do this very important work; **have it done at all hazards.**

Your clerk will appreciate any confidence you may repose in him if he is of the right sort, and it will be of untold value to him in not only making

him a better clerk, but a better pharmacist as well. And good pharmacists are what we need and must have if propaganda work is to succeed in its mission. Give the clerk a chance, but **see that the work is done thoroughly.**

CHAPTER XVII.

Everything that you do in your laboratory brings you profit. Either you learn to make preparations better, which is profit to your knowledge; or you learn to make them cheaper than you buy them, and that is profit to your purse.

Laboratory Possibilities.

The possibilities of your laboratory, aside from the manufacture and testing of the official preparations, are many; advanced medicine requires and stimulates advanced pharmacy.

It is creditable to the large body of pharmacists that so many are taking up the examination of pathological specimens for physicians as a profitable addition to their laboratory work, notably the examination of urine, which we will briefly consider.

Whether a charge is made for the analysis of urine, must rest with each individual druggist as far as his physician patrons are concerned. However, for others a charge must always be made, either 50c or \$1.00, according to circumstances.

Examination of Urine.

The apparatus necessary for this work is very simple and inexpensive, but should include a reliable treatise on Urinalysis. Several good ones can be had, as Tyson's Urinalysis; also Stadler & Coblentz's Chemistry, from the latter of which several of the tests here given are taken.

It includes a test-tube rack, a half dozen each of four and six inch test tubes, a few small funnels, beakers, evaporating dishes, an alcohol lamp, a test tube holder, a graduate pipette dropper, filter paper, red and white litmus paper, reagent bottles and a urinometer.

This urinometer is for taking the specific gravity and is used in a glass cyl-

inder, preferably on a stand, and which has three or four indentations or ridges on the inside in order that the urinometer may move about freely and not cling to the side of the cylinder, thus aiding materially in giving the exact reading.

Keeping Records.

In order that your examination may show the exact condition of the specimen examined, you must record systematically the results obtained, that the physician can tell at a glance the pathological conditions present.

For this purpose you prepare in advance a number of cards or sheets of paper, with a blank space after each of the following subjects, and as you examine the specimen, you simply fill in the blank space with whatever your findings are:

URINE EXAMINATION.

Specimen from .....	.....
From first daily passage or	.....
From mixture of total 24 hours urine.	.....
Specific Gravity .....	.....
Reaction .....	.....
Appearance (clear or cloudy).....	.....
Amount in 24 hrs .....	.....
Color .....	.....
Odor .....	.....
Amount by volume of sediment.....	.....
Character of sediment .....	.....
Abnormal Constituents.	.....
Albumin .....	.....
Sugar (Glucose) .....	.....
Blood .....	.....
Bile .....	.....
Pus (Peptone) .....	.....
For Dr. ....	.....
Date .....	.....
Examination made by .....	.....

Physical Characteristics.

To assist the pharmacist in making a more intelligent statement to the physician, the physical character of the urine must be understood. The color varies with the amount passed, being dark for a scant urine and light for an abundant urine. It is an animal fluid, filtered by the kidneys from the blood, and is transparent when recently voided, but becoming cloudy in a few hours owing to the separation of phosphates.

Its reaction is usually distinctly acid to litmus, and it should be examined as soon as possible after being voided.

The amount passed every twenty-four hours varies from about 40 to 50 ounces, according to the temperature of the atmosphere, exercise indulged in by the individual and the amount of

liquid taken, as coffee, beer, water, etc., and for the same reason the specific gravity will vary.

Normal urine may have a specific gravity of from 1.010 to 1.030, compared with water at 15° C. (60° F.)

The character of the sediment may be a flocculent, flaky, powdery or granular precipitate, and of various colors.

We will at the present time only occupy ourselves with the abnormal constituents of urine.

Testing for Albumin—The Heat Test.

Albumin may be detected by five practical and accurate means, two of which should always be made, and all if possible, in order to supplement the evidence obtained and confirming the original findings.

The first test is that of coagulation by heat; pour about 10 Cc. of filtered urine into a test tube, add two or three drops of official acetic or nitric acid and gradually warm the upper part of the fluid to boiling. If albumin is present, the hot part will become turbid, due to coagulation of the albumin and can be readily recognized by comparing the two portions in the test tube. The acid is added to prevent precipitation of the phosphates. Should no turbidity result from your test, continue the boiling and add more acid, a few drops at a time, until 20 drops have been added, and set the tube aside for a few hours. If then no distinct precipitate is visible, albumin is absent.

The Nitric Acid Test.

Put about 2 Cc. of official nitric acid in a test tube, hold in a nearly horizontal position and slowly pour down the side of the tube a few Cc. of the urine, forming a layer above the acid, but not mixing with it. The urine can be added by means of a pipette or dropper, the object being to prevent mixing of the two fluids.

Albumin, if present, appears as a white zone at the juncture of the liquids. Set aside for ten minutes and inspect again. Should a white zone appear, heat carefully, still avoiding the mixing of the liquids. If it disappears, the zone was only urea or urates which sometimes are present in large amounts. If the zone is permanent, it

is albumin or mucin. If the heat test is applied as above with filtered acidulated urine the mucin is removed by the filtration.

The Picric Acid Test.

One part of picric acid is dissolved in 90 parts of cold distilled water and filtered. Use the same as in the above nitric acid contact test, using about 10 Cc. of urine to 3 Cc. of the picric acid solution, the test solution being on top.

In this case, however, hold the tube in a slanting position and revolve it slowly so that the test solution may mix with an equal volume of urine, and until the yellow color occupies the upper half of the tube's contents.

If albumin is present, this upper half becomes turbid, as shown by contrast with the lower layer of clear urine. Now heat gently.

If the turbidity is permanent and resolves itself into a whitish zone at the line of contact after the tube has been set aside for an hour, albumin is present.

Should the two liquids as above be mixed in the tube and heated, the coagulated albumin will appear as a precipitate.

The Mercuric-Potassium Iodide Test.

Any mucin present must first be precipitated by acidulating the urine with a little acetic acid and removing it by filtration.

The test solution is Mayer's Reagent, No. 63.

Use both methods with this test also, as above—that is, the contact test and the mixing test.

A permanent white ring or a precipitate, after heating, indicates albumin.

The Acidulated Brine Test.

Remove mucin as in above, using hydrochloric acid in place of acetic acid. The test solution is made by adding 35 Cc of official hydrochloric acid to 500 Cc of a cold, saturated, aqueous solution of sodium chloride and filtering, using the clear filtrate as the test. Use the same as in above instance, by contact and by mixing,

only in the contact test, place the test solution in the tube first, as it is heavier than urine.

The ring or precipitate of coagulated albumin is white.

CHAPTER XVIII.

While blood, bile and peptone (commonly called pus), as abnormal constituents of urine, are not frequent, their presence must always be considered as important to the physician.

Testing for Peptone (Pus).

To a small portion of cold urine, add a few drops of acetic acid and filter; this removes any mucin present; then boil, which will coagulate any albumen present, and again filter. This filtrate is now mixed with half its volume of the Alkaline cupric tartrate volumetric solution. (This is the well known Fehling's Solution, the formula for which appears on page 546, U. S. P.)

Now filter it a third time, to remove any precipitated earthy phosphate, and if the filtrate shows a rose-colored tint, peptone is present.

Peptone is not precipitated by heat, acetic or nitric acid, nor acidulated brine, therein differing from albumin. Mercuric potassium iodide and picric acid do precipitate it, but the precipitate is redissolved by heat, but in using these two tests, any mucin and albumin must first be removed.

Testing for Bile.

The presence of bile in urine may be suspected if the color is yellowish green, green, greenish brown, or almost black, and gives a yellow froth on agitation.

Two tests are advisable here: The coloring matter in bile is detected by the contact method using fuming nitric acid; a green color at the juncture of the liquids indicating bile.

The detection of the biliary acids is somewhat troublesome, but very simple; evaporate 100 Cc. of urine to dryness on a waterbath, extract the residue with two small portions of absolute alcohol, filter, and mix the filtrate with fifteen times its bulk of ether.

Decant the ethereal liquid, and when the precipitate is dry, dissolve it in distilled water and decolorize the solution by filtration through animal charcoal.

Now place 5 Cc. of this solution in a test tube and add one drop of a 20 per cent solution of cane sugar. Then add pure concentrated sulphuric acid, drop by drop, until the precipitate that is first formed is redissolved, even though it take 5 Cc. of acid.

Keep the test tube in cold water that its contents may not get too hot; but it should not get too cold, either—about 70 degs. C. is right. A pure cherry-red or purple-violet color indicates bile. If a yellow color appears, it shows that the contents of the tube have become too hot, causing a burning of the small amount of sugar.

Testing for Blood.

Prepare a solution, as follows: Dissolve a small particle of guaiacum resin, taken from the interior of a larger lump, in alcohol. Also prepare some ozonized ether by shaking together in a test tube equal volumes of hydrogen peroxide and ether.

Now mix equal portions of these two solutions and add a small quantity of the suspected urine, and shake. Allow to stand, until the ether layer separates.

If blood is present, this ether layer is colored blue. If the amount of blood is small, a quarter of an hour may elapse before the blue color is visible. As the blue color is fugitive and soon fades, the test must be closely watched. Albumin interferes with this test and if present must be removed by boiling and filtration.

Testing for Sugar (Glucose).

Glucose is indicated if the Sp. Gr. of the urine is above 1.030, pale in color and the daily amount passed over 50 ounces. Always prepare urine as follows before testing for sugar: Remove albumin and mucin as stated under Peptone test; to the filtrate add enough official sodium hydrate solution to make slightly alkaline, warm gently until the phosphates separate distinctly and then filter.

Moore's Test.

Mix 3 Cc. of this prepared urine and

1½ Cc. official sodium hydrate solution and boil. If sugar is present, a brownish color is produced, becoming more intense as the boiling is continued, and may even become black if the quantity is large. If nitric acid is now added in excess, this brown or black color disappears and the odor of caramel is developed.

The Potassium Picrate Test.

Add to 5 Cc. of prepared urine, 1 Cc. of a saturated aqueous solution of picric acid and 1 Cc. official potassium hydrate solution and boil for a few minutes. If sugar is present, a dark mahogany red color appears. (Albumin does not interfere with this test.)

The Bismuth Test.

Mix about 3 Cc. of prepared urine and 3 Cc. official potassium hydrate solution and about ½ grain bismuth subnitrate and boil for several minutes. The black precipitate of metallic bismuth indicates sugar.

Should, however, this same test, if the bismuth is replaced by lead monoxide, also produce a black precipitate (lead sulphide, caused by the presence of sulphur), then it is not conclusive, as any sulphur containing substances produce a precipitate of black bismuth sulphide.

Trommer's Test.

Add to 5 Cc. of prepared urine just enough copper sulphate test solution to impart a greenish or bluish color, then 5 Cc. of official potassium hydrate solution and boil for 1 minute. A yellow precipitate indicates sugar, which turns red on continued boiling.

Fehling's Test.

Dilute 1 Cc. of Fehling's solution (see under Testing for Peptone, and which solution must be examined critically itself; it must give no precipitate when heated by itself) with 4 Cc. of distilled water and boil. Now add a few drops of prepared urine and again boil, for 1 minute. If much sugar is present, a reddish yellow color or precipitate is produced. If no such result is obtained, add 1 Cc. of prepared urine to the contents of the tube and again boil.

If still a negative result is obtained, the urine may be considered free from glucose, but to make sure, set the tube aside for a few hours in order that any small amount of precipitate may settle, which can readily be seen if present, on the bottom or sides of the tube.

Experimenting.

In order that you may become thoroughly familiar with the appearance of the various color reactions and precipitates in case your first experiments are all with healthy urine, proceed as follows:

For albumin, add a small portion of white of egg to the urine and shake well; for sugar, add a few grains of cane sugar, or a few drops of glucose; for blood, add a few drops of fresh blood; for peptone, add a small particle of matter from an old sore; for bile, procure some real bile at a meat market.

Then, by testing for these substances, knowing their actual presence, a certain feeling of positiveness is born in you, not possible otherwise, that will be of great value to you in future work.

CHAPTER XIX.

The second letter to physicians provides for the preparation of the following three preparations:

Elixir Buchu Compositum, N. F.;
Liquor Antisepticus Alkalinus, N. F.;
Syrupus Pini Strobi Compositus, N. F.

As there will always be two week's time in which to prepare these preparations before the letter is sent out, you have abundant time to procure all the various ingredients, prepare them **exactly** right, and to allow a few days standing before filtration, for those that need to be filtered.

The important point to consider in the manufacture of these preparations is that you must use **standard, official U. S. P.** drugs and chemicals, and must so specify on your orders to the wholesaler; leave nothing to chance or to the wholesaler's discretion, but specify "U. S. P." quality, and **see that you get it.**

In no **other** way can we be assured of a perfect pharmaceutical and efficient therapeutical product.

1.—Elixir Buchu Compositum, N. F.
Compound Fluid extract of Buchu (N.F.) 250 Cc...\$0.35
Alcohol 62 Cc... .05
Syrup 62 Cc... .01
Aromatic Elixir 626 Cc... .18
Purified Talc 15 Gm.. .01

1000 Cc., cost \$0.70

While a good preparation of this can be made by simply mixing in the proper order and in a bottle, it is advisable to prepare same in a mortar. Proceed as follows: Put the Talc in the mortar and mix well with the Fluid extract; then add the alcohol mixed with 50 Cc. Aromatic Elixir. The object of adding the Aromatic Elixir to the Alcohol is to produce a liquid of the same alcoholic strength as the Fluid extract, thus materially retarding precipitation during the diluting process. Now add the balance of the Aromatic Elixir, 576 Cc.; and lastly, add the Syrup.

In adding the various ingredients, do it slowly and with constant stirring. Now transfer the contents of the mortar to a bottle, cork well, shake occasionally and filter.

If possible, allow to stand two days before filtering, and moisten the filter paper with a 37 per cent alcohol (about 1½ dr. alcohol and 2½ dr. water).

If the first part of the filtrate is not perfectly clear, return it to the filter until it is clear, and finally add enough Aromatic Elixir to make the finished product measure 1000 Cc. When filtering, always moisten the filter paper with a mixture representing as near as possible the composition of the menstruum in the preparation to be filtered, as regards alcoholic contents; this prevents clogging and hastens the process.

If you are compelled to purchase the Compound Fluid extract of Buchu, specify N. F., as many manufacturing houses market a compound Fluid extract of Buchu containing Sweet Spirits of Nitre.

As this Elixir in all probability will become a very popular one, it is advisable for you to prepare your own fluid extract.

2.—Liquor Antisepticus Alkalinus, N. F.

Potassium Bicarbonate	32	Gm..	\$0.01
Sodium Benzoate	32	Gm..	.04
Sodium Borate	8	Gm..	.01
Thymol	0.2	Gm..	.01
Eucalyptol	0.2	Cc...	.01
Oil Peppermint.....	0.2	Cc...	.01
Oil Gaultheria	0.4	Cc...	.01
Tincture Cudbear ...	16	Cc...	.01
Alcohol	60	Cc...	.05
Glycerin	250	Cc...	.12
Purified Talc	10	Gm..	.01
Water, q. s. to make	1000	Cc...	.00

1000 Cc., cost \$0.29

The directions are to dissolve the salts in 600 Cc. of water, and the Thymol, Eucalyptol, and Oils in the Alcohol. Now mix the alcoholic solution with the Glycerin and the Tincture of Cudbear, and to this solution **gradually** add the aqueous solution of the Salts, with frequent agitation.

Add to this enough water to make 1000 Cc., add the Talc and shake occasionally during a few days, then filter, returning the first portions until the filtrate passes brilliantly clear.

For the same reasons as given under "Liquor Antisepticus," see page 32, the following solution should be prepared:

Thymol	4	Gm.
Eucalyptol	4	Cc.
Oil Peppermint	4	Cc.
Oil Gaultheria	8	Cc.
Alcohol q. s. add	300	Cc.

Label this solution "For Liq. Antis. Alk., N. F.," adding the formula to the label.

Now when 1000 Cc. of Alkaline Antiseptic are to be made you mix 15 Cc. of this solution with 45 Cc. Alcohol and proceed the same as in the formula. By proceeding this way you are positive of getting the exact amount of the odorous ingredients which is of great value as regards uniformity in making this preparation at different times.

Important.

Tincture of Cudbear is the N. F. preparation, Tinctura Persionis, made with 33 1/3 per cent Alcohol; in the finished Alkaline Antiseptic, which is a much weaker alcoholic preparation (6 per cent), some of this color is doubtless precipitated and part of it is possibly acted upon by the alkaline salts; however, the color produced is not what it should be, doubtless owing also to the fact that the Cudbear of the market varies in quality, and also that it is difficult to extract it entirely by percolation to a 12½ per cent tincture.

For this reason, therefore, it is recommended that instead of using 16 Cc. Tincture of Cudbear in the above preparation, an equivalent amount of Powdered Cudbear be used, namely, 2 Gm., adding this powder last and increasing the amount of Alcohol in the preparation by 5 Cc., thus making up the deficiency caused by leaving out the Tincture of Cudbear. The resulting preparation will then have a beautiful, rich purplish-red color, and in no way is the composition, character or uniformity changed.

3.—Syrupus Pini Strobi Compositus, N. F.

White Pine Bark.....	85	Gm..	\$0.05
Wild Cherry Bark ...	85	Gm..	.03
Spikenard Root	10	Gm..	.01
Balm of Gilead Buds.	10	Gm..	.01
Sanguinaria Root	8	Gm..	.01
Sassafras Bark	7	Gm..	.01
Morphine Sulphate...	0.5	Gm..	.05
Chloroform	6	Cc...	.01
Sugar	750	Gm..	.09
Alcohol .....			.09
Water .....			.00
Syrup, of each, q. s. ad	1000	Cc...	.01

1000 Cc., cost \$0.37

Cost, per gallon, about \$1.25.

Reduce the six vegetable drugs to a moderately coarse (No. 40) powder, moisten the powder with a menstruum composed of Alcohol 1 volume, Water 7 volumes, and macerate for 12 hours.

These mixed powders must be moistened with such a quantity of menstruum, that when a handful is compressed in the hand it will retain a

mass form but will easily crumble to powder form upon slight pressure.

Now percolate with the same menstruum until 500 Cc. of percolate are obtained. In a small portion of this dissolve the Morphine sulphate, mix with the balance and then dissolve the Sugar in it by agitation.

Add to this the Chloroform and sufficient Syrup to make 1000 Cc., and strain.

The Chloroform is best added by first thoroughly shaking it with about 5 oz. of the syrup in an 8 oz. bottle.

This Syrup offers no difficulty in its manufacture, but the percolation must be proceeded with slowly; the percolate must come in drops, that the drugs may be practically exhausted.

If your percolate is not perfectly clear and brilliant, filter it before adding anything to it, so that your finished syrup may be perfectly clear.

CHAPTER XX.

The following is an original paper on the much discussed N. F. preparation, *Liquor Ferri Peptonati cum Mangano*, by Thos. D. McElhenie, Brooklyn.

If the information herein contained be added to that found on page 30 on the same subject, valuable information will be at hand for a good reliable preparation. (See also Chapter LX, page 101.)

Liq. Ferri Peptonati c Mangano, N. F.

Having made up some months ago 1,000 Cc. of *Liq. Ferri Peptonati cum Mangano* N. F., strictly by the book, using the powdered peptonized iron and manganese of standard make, I quite agree with Prof. Harrison of the Northwestern University as to the repulsive quality of the product.

Necessity the Mother of Invention.

I was helped to this opinion by a Brooklyn physician not previously known to me, on whose prescription I had dispensed some, as no maker was named.

His patient complained of the taste and he came to "blow me up."

About that time appeared the May Bulletin of the A. Ph. A., containing Prof. Harrison's paper on "Proteid Iron Combinations," and on a banter from a woman physician of my neighborhood to beat Hemaboloids, if I could, I began working up the Harrison process and very satisfactory as I think. I have samples for inspection, also a sample of the N. F., which John B. Gough would call "the terrible example."

The Essential Feature.

The essential feature of the process is the making of iron peptonate from egg albumen in the nascent form as a magma.

As the characteristic unpleasant odor of peptonization soon developed in the washing of the magma, it occurred to me to try the idea advanced by Dr. E. H. Squibb in 1873 of protecting organic solutions by a small percentage of phenol.

By completing the washing of the magma of my first lot with a 1 in 1,000 solution phenol, the odor practically disappeared and in all later operations, using the same protective measure from the start, no odor has been perceptible at any time.

The magma dissolves readily in the solution of sodium citrate to a deep red solution, but as might be anticipated, the addition of alcohol to a solution of peptone or a peptonate, or adding the solution to the alcohol, there is sure to be a coagulation, but by adding to the dissolved peptonate first the aromatic elixir and sufficient water to make 400 Cc. and then the alcohol, making 500 Cc. as a base solution instead of 400 as proposed by Prof. Harrison, the result is a fine clear red permanent solution.

An Easy Process.

As to the practical working out of such a process, while it looks rather troublesome in the reading, it is quite easy in practice.

Speaking now of a double portion, 2,000 Cc., weigh the 250 gm. of egg albumen (being the average yield of 9 eggs) into a tumbler—turn it into a gallon bottle about three-quarters full of phenol solution (1 in 1,000) as spoken of—shake until thoroughly disintegrated.

In a quart bottle put 2 gm. pure pepsin and 8 Cc. hydrochloric acid and fill with phenol solution. Shake occasionally until dissolved, add to the albumen solution, and add 22 Cc. hydrochloric acid.

I have found after several trials that this albumen solution is almost entirely converted into peptone by standing, say 24 hours, without heating, but to make sure I heat it a little while in a water bath and try a little in a test tube by boiling.

With a little practice one can readily tell from the foam made by shaking how near it is to completion. As the process goes on, the foam is less opaque and less persistent. Filter this peptone solution into a 2 gallon bottle.

In the meantime make ready the iron solution as described by Prof. Harrison, not forgetting to double all quantities, and with phenol solution make up to 1 gallon and mix with the first.

Then add in small portions, say 30 Cc. each, solution of sodium hydroxide, enough to render the mixture slightly alkaline. This will require about 400 Cc. The saturation point is easily seen by the discharge of color.

Peptonate Must Be Washed.

The peptonate subsides slowly and it is to be washed by decantation until practically free from chloride, as shown by silver nitrate test solution. After making 3 or 4 lots it occurred to me to test the phenol solution and the water from the faucet, both of which showed a trace of chloride.

Since then, after washing very nearly clear with phenol solution, I complete the washing through the filter with 2 or 3 quarts of distilled water. The only work in the whole process is the handling of the 2 gallon bottle of magma, shaking and decanting.

Easy Decantation.

I soon hit on the plan of decanting each morning and refilling with phenol solution; in this way it takes about a week to wash free from chloride but requires only a few minutes every morning.

The best way to drain the magma I find to be by folding together a large sheet of filtering paper and a circular piece of thin muslin of same size, so that the paper is uppermost, and let them lay flat against the funnel; when drained, the paper is easily lifted out and laid on a folded newspaper to drain.

A Superior Preparation.

Then make the solution and additions as given by Prof. Harrison and the result is a preparation superior to Pepto-Mangan, Ferro-Mangan, Ovoferrin, Neoferrum, Hemaboloids, Peptonoids, etc., and any pharmacist can make it. Any physician or pharmacist in reach of my store is welcome to any point I can give him.

The alcoholic content of the product is about 14½ per cent. I have one sample in which Elixir Aromatic replaces alcohol, reducing the alcoholic percentage to about 7 per cent.

The cost to make is about 90c per 1,000 Cc. not figuring labor.

This preparation will prove useful as a base, for various combinations; as equal parts of it and extract malt, etc.

CHAPTER XXI.

It is doubtless clear that the province of the pharmacist is to confine himself to drug dispensing and that it is his duty to discourage self-medication by the laity except in cases of the most simple ailments.

However, the sudden jump from present conditions to what they ought to be (and some day will be) is a super-human task—one that few pharmacists can accomplish successfully, and one

which the present over-doped public will not relish.

Therefore the public must be educated away from self-medication; or, in other words, it must be weaned away from it gradually. The "patent medicine habit" of the present is a relic of past conditions, and it will die hard.

Existing Conditions Must Be Met.

The demand for unscientific and unethical products is here, it actually exists, and people as yet are satisfied with these preparations. Physicians realize this, and to their everlasting credit be it said, they can see that the pharmacist has a hard row to hoe in weaning the public away from its self-medication habits and training.

The people believe it is their privilege to dose themselves, on all occasions, they don't know any better, because the custom has been handed down from generation to generation, and they do not realize that largely on account of it are we really a nation of chronically-diseased people.

That pharmacists may understand the truth of what we say they must realize that all so-called patent medicines are actually for the purpose of treating a "person," "the name of a disease"—but never for "an actual pathological condition." That is why self-medication should be limited to the simplest of ailments.

Medicine Don't Cure.

It is only the experienced man, the physician who, realizing the tendency of nature to repair any abnormal, diseased or disturbed condition of the human body, can assist nature in this repairing or healing tendency, by directing his efforts, with drugs or other means, toward the various conditions as they manifest themselves to him by various symptoms in each particular case.

Hence the credit given patent medicines, and some ethical mediums, at times, for cures, is really due to the natural healing tendency of nature.

Facing a Real Proposition.

What concerns the pharmacist, however, at the present time, is the fact

U S
Gramm

that he is virtually compelled to handle so many really useless so-called medicines and at such a small margin of profit.

A price of \$8.00 per dozen is considered a fair one today for a dollar article. The average pharmacist **must** expend 25c "for running expenses" from every dollar that goes into his money till.

What does this mean? It means that every pharmacist, when he sells a dollar bottle of patent medicine for cash, must pay 67c to replace it, he must pay 25c (in store rent, clerk hire, etc.) for selling it, and the balance, 8c is his real profit.

It is for this reason that we are bringing to the attention of pharmacists some formulas for the preparation of non-secret, household and domestic remedies, that the public may at least get an honest value for their money and that the pharmacist may have some recompense in a financial way for selling this class of preparations, and also that he may better be able to impress upon his customers the imperative need of competent medical advice in all but the most simple cases.

Physicians Welcome the Change.

A right-minded physician will welcome this change on the part of the pharmacist for many apparent reasons, one of which is that it is far better for the pharmacist to get the real profit on the sale of his own domestic remedies than to give this benefit to some outside manufacturer.

However, there are honest, conscientious manufacturers of proprietary medicines who are doing the best they can by both the retailer and public; these should always be given preferential consideration by right-minded pharmacists.

The change advocated is simply a medium of turning the really sick and needy from the use of unscientific, secret medicines over to the care of experienced men, medical and pharmaceutical, to the end that we may finally become a more healthy and rational people, free from the so-called national trait of dosing themselves for all man-

ner of real and imaginary ailments.

An important thing to do is to call the remedy your own, that is, the label should state that you are the maker. Do not be ashamed of your name, for if any credit attaches to the article, get it yourself.

A Good Ointment.

Camphorae	gr xlv
Ol Sassafratis	minim xlv
Phenolis	3iv
Sevi praeeparati	3ii
Zinci oxidi	3iii
Cera flavae	3iii
Adepsis	3vi
Petrolati	3xviii

This is somewhat troublesome to prepare, but it is worth all the effort, as it is a valuable ointment. Melt the lard and make a smooth ointment with the zinc oxide. Then in a vessel large enough to contain the full quantity, melt the vaseline, wax and suet; to this add the zinc ointment first prepared, stirring well and if necessary apply heat, that the entire mixture may be uniform.

Before it thickens, add the camphor dissolved in the oil, and the phenol; then stir until it congeals.

It is important that all drugs be strictly pure and the suet especially must be the officinal drug.

A Good, Profitable Seller.

This ointment costs 19c per pound and may be put up in 2-oz. flat seamless tin boxes with rounded bottom, or in 2-oz. ointment jars. Price, 25c.

Where common tin ointment boxes are used, the covers should first be washed with a 25% caustic potash solution, and rinsed with water and then dried; this will prevent the label from coming off.

A neat appropriate label could state that this valuable household remedy was excellent for old sores, cuts, bruises, burns, etc.

By folding around this package a circular of some kind and enclosing it in a cartoon, a neat, presentable package is obtained; blank cartoons can be used with the regular ointment label pasted upon it.

The cost of each finished package will not exceed 5c and will always be under 60c per dozen, and you can thus offer your customers a larger package and a better preparation than any other which they can buy, and obtain a fair profit for your ability.

Besides, it is price protected if you care to make it so, for you are the sole maker and seller.

CHAPTER XXII.

In previous chapters it has been shown conclusively that the real profit of the drug business consists in working towards the laboratory end of the profession and finding a sale for what you produce.

That this great truth is generally realized is abundantly proven by the wonderful impetus that has been given to the general propaganda movement by druggists who had previously made no preparations and who were encouraged to become makers or creators by this educational work.

The wholesale drug houses also report increased activity in the sale of crude drugs, presumably for manufacturing purposes by the retailer, all of which goes to show that the "getting back to first principles in medicines" is becoming a reality.

Become a Creator, Instead of An Order Clerk.

Now, all the evidence that has been produced, and which has caused this great stimulation in the manufacture of official preparations, is applicable with equal force to the preparation of the druggist's own domestic remedies.

Become a creator, instead of a mere order clerk for other producers, and as far as lies in your power become independent of all unworthy, useless and unprofitable preparations.

Don't get into the habit of buying "your own make" preparations from some manufacturer, whose interest and yours can not always be similar; this habit induces laziness and is but a few steps removed from the sale of secret and faky nostrums.

The manufacturer is very liable to

give you a class of preparations, as regards price and quality, that will compare favorably with that of other competing manufacturers, but you generally get what you pay for—cheap price, cheap goods.

Let your line of reasoning be this: If I can make a more reliable official preparation at a less cost than I can buy it, it is proof positive that I can also make a more reliable domestic remedy at a less cost than I can buy it. Very simple and conclusive, is it not? And the facts will bear out the statement.

Pharmacy is not a lazy man's business, although the tendency in recent years has been such as to bring about a "hand-me-down" state of affairs; but it is to the credit of the American pharmacist that he is himself bringing about a change for the better.

Quality and Appearance Important.

In offering your domestic or household remedies to the public it is unnecessary to have expensive or fancy labels and cartoons, or to imitate the style of the advertised proprietaries.

While good looks are not to be despised, let the quality be the first consideration and a plain, neat appearance the next. A plain, perfect bottle, a good looking preparation and a neat label and a bottle cap, have powerful selling possibilities when placed upon your show cases and in the windows.

Should your remedies prove a success in your locality do not let this fact "turn your head" and lead you to think that you have a fortune in your grasp by putting them "on the market."

Supply Local Demand Only.

Don't—the temptation is great, to be sure—but the moment you begin to think that they are superior to all others and are ready to advertise them on a large scale, from that moment you may reckon possible failure, downfall, or bankruptcy.

You must consider well the fact that we are suffering from a superabundance of proprietary medicines and nostrums, approximately 50,000 kinds,

each one apparently different from all others.

Also the fact that there being a limit to the number of human ills, a great many of these "patents" are rivals for the cure or relief of the same ailment, thus making competition very keen.

In fact so sharp is this competition and so expensive is the competitive warfare, that the preparation itself in most instances is a mere side issue, a trifle, an unimportant detail.

The money, the energy, the ingenuity are expended in finding or making a market for it.

Take away the newspaper and other advertising from them, and the great majority would soon cease to exist.

Do Not Imitate Others.

Many of the evils of pharmacy today are directly traceable to this great difficulty of marketing these proprietaries and nostrums—as the cut-rate evil, the abnormal number of drug stores, the decline of the prescription business, etc.,—so don't add fuel to the fire.

Just think of where this will all end, for end it must some day. The limit must be reached some time if it is not already here, and then the backward swing begins.

Then this immense industry, at least the unworthy portion of it, will "topple over and crumble," and when this does happen, you will be safest with your "local" demand; so do not risk your limited capital in this overcrowded field.

The following formulas are time-tried and will give excellent satisfaction in any community.

A Good Liniment.

Capsici	℥iii
Arnicae	℥xvi
Solidago flores	℥xvi
Camphorae	℥viii
Ol. Sassafratis	℥viii
Ol. Menth. pip.	℥ii
Ol. Terebinthinae	℥xxxii
Chloroformi	f℥v
Kerosene, ad	Cong. ii

The Red Pepper, Arnica flowers and Goldenrod flowers can either be macerated with about 12 pints of Kerosene

for three days and filtered, or percolation can be resorted to, which is really the better method.

The other ingredients are then dissolved in this oily tincture and enough Kerosene added to make two gallons. This makes a very efficient preparation for external pains and the label could state that it is a valuable liniment for soreness, sprains, bruises, rheumatic pains, etc.

This liniment costs \$1.30 per gallon and may be put up in two sizes, a 3 oz. and a 6 oz. The larger size at 50c and the smaller size (called sample size in advertisements) at 25c.

The small size can be put up for less than 60c per dozen, and as it is superior to most preparations of a like nature on the market, should find a ready sale with proper publicity.

A circular containing some of your advertising can be wrapped around each bottle and the whole enclosed in a neat cartoon, preferably plain and with one of the labels pasted on it.

For counter display these packages of liniment could be displayed without the cartoon, but then each bottle should be capped.

CHAPTER XXIII.

A careful perusal of chapter XXIII in the Propaganda department will warrant the statement that the three following official preparations, with which to sample your physicians are among the most effective that we have to offer.

They are *Fluidextractum Rhamni Purshianae Aromaticum*, U. S. P.; *Emulsum Phosphaticum*, N. F.; *Pillulae Ferri Carbonatis*, U. S. P.

Also, they are seasonable and timely, and with the exception of the fluidextract, can be quickly prepared. It will take about four days to prepare the fluidextract.

We would again call attention to the urgent necessity of having all the ingredients for these preparations of standard quality, to so state on your orders to jobbers or other sellers and to accept none other, and to be careful

and particular in the manner of preparation.

1. Fluidextractum Rhamni Purshianae Aromaticum, U. S. P.

Cascara Sagrada, in No. 40 powder	1000 Gm.....	\$0.55
Glycyrrhiza, in No. 30 powder	100 Gm.....	.04
Magnesium Oxide	125 Gm.....	.16
Glycerin	250 Cc.....	.12
Compound Spirit of Orange	10 Cc.....	.02
Alcohol .....		.35
Diluted Alcohol .....		.46
Water, each, q. s. ad.....	1000 Cc.....	.00

1000 Cc. cost \$1.70

Mix the Cascara Sagrada, Glycyrrhiza and Magnesium Oxide (Heavy Calcined Magnesia) thoroughly, in a large casserole or evaporating dish, add 2,000 Cc. (about 4 pints) of Water, macerate 12 hours (over night) and dry at a gentle heat.

Object of the Magnesia.

The Magnesium Oxide is added for the purpose of destroying the intensely bitter taste of the Cascara, and while some of the active principle may possibly also be destroyed in this process, the increased palatability more than overbalances this loss.

When the mixed powders are dry, moisten them with 400 Cc. of the following menstruum: Glycerin, 250 Cc.; Alcohol, 500 Cc.; Water, 250 Cc.

After the moistened powder has stood about 15 minutes, pack it firmly in a cylindrical percolator (not conical or funnel shaped).

Now add enough menstruum to saturate the powder and leave a portion of it above the powder.

As soon as the powder is entirely saturated and the liquid begins to drop from the percolator, close the lower orifice, cover the percolator to prevent evaporation and macerate for fully 48 hours.

Percolation Must Be By Drops.

Then allow the percolation to proceed slowly, in drops, and add the remaining 600 Cc. of menstruum. When the last of the menstruum is just about to disappear from the surface of the

powder, add as a fresh menstruum diluted alcohol. Never allow the surface of the powder in the percolator to become dry or exposed to the air, except when no more menstruum is to be added, otherwise the process of extraction is seriously interfered with. Air bubbles making their appearance is proof that you have been negligent in this respect. Diluted Alcohol is added continually as a fresh menstruum until the powder is practically exhausted; this is ascertained by the absence of color in the percolate and also by the absence of the characteristic taste of licorice.

Finishing the Process.

One quart of diluted Alcohol is usually sufficient to complete the percolation, providing you proceed as follows: After the first 1,000 Cc. of menstruum have disappeared, you add 1,000 Cc. of diluted Alcohol; when this has also disappeared, you add 250 Cc. of a menstruum (labelled menstruum No. 3) composed of 100 Cc. Alcohol and 150 Cc. water; when this has disappeared, add 250 Cc. of a menstruum (labelled menstruum No. 4) composed of 50 Cc. Alcohol and 200 Cc. water; when this has disappeared add 250 Cc. of a menstruum (labelled menstruum No. 5) composed of 25 Cc. Alcohol and 225 Cc. water. The object of adding these three menstrooms, each succeeding one weaker in Alcohol, is to "push out" all of the first 2,000 Cc. of percolate and also for the purpose of preventing the process from "choking."

Choking the Process.

If water would be added immediately after the second menstruum (diluted Alcohol) had disappeared, in place of the other three menstrea, it would have caused a swelling of the powders and "choking," or a stopping of the process would result.

This is avoided by gradually reducing the Alcohol content of the menstruum. About 24 oz. of Alcohol are wasted in this process of making 1000 Cc. of fluidextract, but a proportionately smaller amount is wasted in making larger quantities.

The cost per gallon is about \$5.75.

The first 800 Cc. of the percolate is reserved, and the remainder, 1,200 Cc., is evaporated to a soft extract. This soft extract is now dissolved in enough diluted Alcohol to make 190 Cc., the Compound Spirit of Orange being added, and the solution allowed to stand a few hours and filtered. It is then mixed with the 800 Cc. reserved portion.

A Slight Modification.

It would be better to dissolve the soft extract in a 60 per cent Alcohol in place of diluted Alcohol, as the extract contains some water; this would make the 190 Cc. of solution more nearly of the same Alcohol strength as the 800 Cc. Reserved portion, thus preventing any possible precipitation in the finished product.

As Cascara Sagrada and Licorice root are comparatively easy of extraction if the powders are properly and uniformly packed, another modification may be used.

In the above official formula, the first 800 Cc. of reserve represents practically finished fluidextract; the balance of the percolate, 1,200 Cc. representing the other 200 Gm. of Cascara.

If then, the amount of drug be changed to the following quantities, and percolation be continued to 990 Cc. slowly you will have 1000 Cc. of fluid extract, (after adding the Spirit).

Cascara Sagrada.....1,350 Gm.
Glycyrrhiza 135 Gm.

If this process is adopted you must be very careful as to all the details—especially moistening, packing and slowness of percolation, and the use of a narrow percolator is compulsory.

This process has the advantage of being cheaper, as less Alcohol is used, this more than overbalancing the increased cost (1-3) of drugs used. It is quicker, as it does away with the prolonged percolation and necessary evaporation.

The prolonged exposure to heat in evaporating the weaker percolate to a soft extract, generally renders the greater portion of the extract inert.

Every pharmacist should read up on the subject of percolation in the standard text books of pharmacy; the Nat. Stand. Dispensatory, page 646; the U. S. P. Dispensatory, page 521; or the National Formulary, page 56.

In "Additions and Corrections" to the U. S. P. (8th Rev.) Preface, will be found the following: "In the manufacture of products and preparations on the large scale, deviation from the official processes may be necessary, but the products must conform to the official requirements as determined by the tests of the U. S. P., 8th Rev., and the finished preparations must be identical with those made by the official processes."

2.—Emulsum Phosphaticum, N. F.

Cod Liver Oil,.....	250 Cc.	\$0.08
Glycerite of Yolk of Egg	165 Gm.	.16
Diluted Phosphoric Acid	50 Cc.	.02
Oil of Bitter Almond..	1.5 Cc.	.05
Jamaica Rum	250 Cc.	.32
Orange Flower Water,		
q. s. ad.....	1000 Cc.	.20
		<hr/>
		1000 Cc. cost \$0.83

This is a comparatively easy preparation to make, no mortar being necessary, except for the preparation of the Glycerite of Yolk of Egg, which is made by rubbing to a smooth paste 75 Gm. of Yolk of Egg, and gradually adding 90 Gm. of Glycerin.

Transfer this Glycerite to a half gallon bottle, or if preferred the Emulsion can be made in the mortar, and **gradually** add the Cod Liver Oil, a small portion at a time, and shaking or stirring after each addition until the added portion is emulsified.

Now gradually add about 250 Cc. of orange flower water (which must be perfectly clear, colorless and free from any sediment or growth), and then in the order here given, the Oil of Bitter Almond, diluted Phosphoric Acid, the Jamaica Rum, and finally enough Orange Flower Water to make 1000 Cc. Mix thoroughly.

If this emulsion is made as here outlined a very elegant and stable preparation results.

In making emulsions in a mortar, hard pressure is to be avoided; light pressure and quick and uninterrupted stirring are the desirable factors.

Yolk of Egg, being a natural emulsion, readily emulsifies the Cod Liver Oil and is always to be preferred in acid mediums.

3.—*Pilulae Ferri Carbonatis*, U. S. P.

Ferrous Sulphate, gran.	16 Gm.	\$0.01
Potassium Carbonate ...	8 Gm.	.01
Sugar	4 Gm.	.01
Tragacanth, pulv.	1 Gm.	.01
Althaea, pulv.	1 Gm.	.01
Glycerin .....		.00
Water, each q. s., ad.	100 pills.	.00

100 pills cost \$0.05

Of first importance is the requisite purity of the Iron and the Potash salts, then every batch of pills can be made exactly like its predecessor.

First, triturate the Ferrous Sulphate and Sugar to a uniform powder and transfer to a piece of paper; then the Potassium Carbonate is rubbed to a paste in a pill mortar with equal parts of Glycerin and Water (about ten drops each); when this is done with the ordinary Carbonate of Potash, the mass becomes too soft, owing to the fact that the Potash Salt is partly deliquescent and not the dry salt of the U. S. P.

Now add the mixed powder to the paste in the mortar and rub the mass thoroughly, until the greenish color appears; then incorporate the Tragacanth and Althaea (previously mixed) and, if necessary, a little Water, so as to produce a mass of pilular consistency. Divide this into one hundred pills

If your mass is too soft at the end of the process, it shows that you have added too much water in the beginning or that the Carbonate of Potash was deliquescent.

Pills Must Be Made Fresh.

These pills should be freshly prepared when wanted and must never be dispensed otherwise; when finished they should be dusted with either Lycopodium or the best grade of powdered Licorice root.

Don't triturate or rub a pill mass; knead it, and make use of your hands in this process at times, for the warmth of the hands is an important factor in forming the mass.

A pill finisher should be used that each pill may be uniform, and every one of the one hundred should look exactly alike.

CHAPTER XXIV.

In manufacturing your own domestic remedies, you really have no need of extra investment for apparatus, if we except such necessary sundries as labels, bottle caps, circulars, etc.

The mere fact that it would take a considerable investment of capital has been the bugaboo that has kept many a pharmacist from doing this very pleasant and profitable work, and has continued to keep him in the ranks of those who "worked for and pushed" the other fellow's goods.

Some Ways of Dressing Your Remedies.

Such preparations as are offered for sale in bottles can be "dressed" in various ways, as follows: Some will prefer the bottle neatly labeled and capped, nothing else; and if the preparation is presentable and the bottle, label and cap are clean, it is all-sufficient.

Another good idea is to wrap the labeled bottle, enclosed in a circular, in a waxed tissue paper.

Enclosing the bottle in a plain carton and labeling this with a label similar to the one on the bottle, also produces a very neat package.

A fourth method, of enclosing in a printed carton, is often adopted, but this is not at all necessary, except when the demand for a preparation is large.

Things to Remember.

Nothing elaborate or fancy is called for, just a good looking package, and the printed matter should occupy no more space than is necessary—be brief and to the point.

Exceptions can be made in the case of toilet preparations; here a fancy bottle, and a label in colors is permissible.

Tall, or short blake bottles are generally to be preferred in putting up household remedies, as these produce a "full solid-appearing package," far superior to a panel bottle.

Toilet Cream.

Cydonium	℥iv
Aqua bullientis, q. s. ad.....	℥iv
Aqua Hamamelidis	℥ii
Sodii Boratis	℥i
Glycerinae	f 3xx
Ol. Aurantii flores.....	Minim iii
Ol. Geranii Rosæ.....	Minim x
Ol. Bergamotti	Minim v
Ol. Amygdalæ amaræ.....	Minim i
Mentholis	gr. v
Extract White Rose, triple.....	℥vi
Alcoholis	℥xvi

The Quince seed is first cleaned in a damp cloth, preferably flannel, and is then added to enough boiling water to make four pints of strained mucilage.

To this add slowly, shaking thoroughly after each addition, two pints of Distilled Extract of Witchhazel, which should contain no Wood Alcohol, and in which has been dissolved the Borax. Then add the Glycerine.

Dissolve the perfumes and the Menthol in the Alcohol and mix with the above mucilage mixture.

This must now be strained at least four times, that the cream may be perfectly smooth and uniform.

A Dainty Toilet Recipe.

This is one of the finest creams that can be offered for sale, always giving excellent results and sure to be called for regularly.

Can be put up in 3 or 4-oz. bottles, with a rather large neck, and this size readily retails at 25c. The bottle should be clear glass, the cork should be neatly capped and a neck strip

would add to the appearance of the package, as would also a colored label, but do not enclose in a carton.

This preparation costs about \$1.40 per gallon and can be sold under the name Toilet Cream, Witchhazel Toilet Cream, etc. Directions on the label will state that it is to be rubbed on the skin until absorbed and the skin is perfectly dry, thus permitting the wearing of gloves immediately after use, etc.

Spring Tonic.

Red Clover Tops.....	℥xxv
Dandelion, Gentian,	
Celery seed, Stillingia, of each.....	℥x
Cascara Sagrada	℥viii
Sugar	℥bx
Iron citrate, soluble	℥v
Ol. Sassafras	℥ii
Ol. Gaultheria	℥ii
Alcohol, Water, of each, q. s.	

Make one and one-half gallons of decoction from the Red Clover Tops with hot water, and when cold, make menstrua, as follows: No. 1, Alcohol 12 oz., Decoction 20 oz.; No. 2, Alcohol 14 oz., Decoction 28 oz.; No. 3, Alcohol 16 oz., Decoction 56 oz.; No. 4, Alcohol 10 oz., Decoction 50 oz.; No. 5, Alcohol 5 oz., Decoction 35 oz. These menstrua must be made at once, otherwise the decoction may sour before it is used.

Now moisten the forty-eight ounces of mixed drugs, which must be in No. 50 powder, with the 32 oz. of menstruum No. 1, and macerate 24 hours.

Then pack moderately firm in a conical percolator and pour on, in succession, menstrua Nos. 2, 3, 4 and 5, percolating slowly.

When No. 5 has disappeared, add water until the percolate measures 13½ pints. Reserve the first 8 pints, and in the balance dissolve the sugar with the aid of heat.

Remove from the source of heat the moment it boils or it may boil over. In this hot syrup dissolve the iron citrate and let cool.

Now mix with the reserve percolate, in which the oils have been dissolved, and the Tonic is complete.

Put up in 8 oz., 10 oz. or 12 oz. bottles and retail at 50c per bottle.

One gallon costs approximately \$1.30.

Other suitable names for this would be Red Clover Compound, Dandelion & Celery, Laxative Blood Purifier, etc.

The directions would give as a dose from one to two teaspoonfuls, after meals.

This Tonic is a very satisfactory preparation and supplies a much-felt want among a class of people who need a spring medicine of a laxative nature.

It is a stable preparation, of a very dark brown (almost black) color, and never precipitates.

Condition Powders.

Bloodroot, Capsicum, each.....lb.	1
Sassafras, Copperas, each.....lb.	2
Ginger, Gentian,	
Antimony (black sulphuret), ea..lb.	3
Saltpeter	4
Rosin, Foenugreek, each.....lb.	10
Salt	20
Sulphur, Linseed, each.....lb.	25

These drugs must all be in fine powder, except the Linseed, where the ordinary ground Linseed should be used.

This is to be put up in the ordinary 1-lb. cartons and retailed at 25c.

If the cartons are not waxed inside, a strip of waxed paper should be placed inside to prevent the package becoming stained from the action of the oil in the Linseed.

A pound of this powder costs about 7c, and can be highly recommended.

CHAPTER XXV.

One very important feature in connection with the bottling and sale of your domestic remedies is that you use a good grade of corks and under no circumstances drive the cork too far down into the neck of the bottle. This would necessitate a corkscrew for opening and many times one is not handy in the house—and the thoughts that originate in the mind of the housewife, as she attempts to pry out the cork with a fork or hair-pin, possibly breaking the bottle or

succeeding in pushing the cork through the neck into the contents below are not very pleasant ones, neither are they business producing ones.

The cork should be of a size that when the bottle is securely corked, about one-third of its length should project beyond the top of the neck.

Price of Your Remedies.

While every rule has its exceptions, and at times well grounded ones, it may be worth while for such pharmacists as charge 75c and \$1.00 for any particular domestic remedy, to consider the following rule: Charge 25c and 50c; and \$1 only for a few preparations. A dollar looks large to most working people, even though they prize their health above most things, and they will not readily part with it, and for your own success it is well to realize this before you attach the price.

If this "dollar a bottle" patent medicine question is studied in its various phases, you may understand why we have "dollar patents," and none of these reasons apply to your case.

First, the only and sole object for the existence of the great majority of them is the making of money for their originators; second, the means employed in exploiting them, such as newspaper ads, buying expensive testimonials, etc., is very expensive; third, on account of the nature of this traffic, every successive step of the delivery from maker to consumer must be paid for, necessitating a high retail price, even though the original cost be small.

The profit on an excellent preparation of your own make selling at 50c is greater than on the sale of a "dollar patent," and while you may think it policy to sell dollar bottles of your own preparations for the sake of the dollar, you lose sight of the fact that you lose very many sales because the price is not 50c.

If you will compare the number of families "in your neighborhood" with the number of dollar bottles you sell in the course of a year, you will find the percentage so small that it will be a powerful argument against the dollar size.

However, the point is this: The average family would rather spend fifty cents at four different times, for a cough syrup or a blood purifier, than spend one dollar once.

It's human nature, and you will do the same thing yourself. The great fault of pharmacists heretofore has been that they would only consider their own ideas, and not the wants of their customers.

An Eye Remedy.

Camphorae	gr. xv
Alcoholis	f 3iss
Ammonii chloridi	gr. xx
Zinci sulfatis	gr. xlv
Croci	gr. iii
Tr. Opii deodoratae.....	3ii
Aquae distillatae.....	f 3viiiiss

Dissolve the Salts in the Water, the Camphor in the Alcohol, mix the two solutions, and add the Saffron and the Tincture. Allow to stand a few days and filter.

The cost of this is approximately 10c per pint, and it should be dispensed in rather tall one-ounce vials at 25c each.

This formula was evolved from the ordinary Boric Acid and Cocain Mixtures and is probably as good an all-round eye remedy as can be produced.

If care and neatness are applied to the operation and perfectly clean one-ounce bottles used, it will never precipitate and it has a beautiful, rich golden color.

Toothache Drops.

Camphorae, Chloralis, aa.....	3ii
Ol. Gaultheriae,	
Ol. Caryophylli,	
Ol. Sassafratis, aa.....	f 3i
Chloroformi,	
Aetheris, aa.....	f 3iv
Alcoholis	f 3v

Mix the Chloral and Camphor until liquefied, then add the other ingredients. This is a repeater and seldom fails to do the work. Its cost and intrinsic worth make any charge under 25c uncalled for and poor business policy.

One pint costs \$1.00, and it should be put up in large appearing half-ounce bottles, retailing at 25c. It will soon displace all 10c and 15c sellers.

The package should include a piece of cotton and several smooth tooth-picks.

Purchasers of toothache remedies should always be warned to thoroughly clean out the cavity of a tooth before attempting to insert the remedy for the ache, as a small piece of food at the bottom of a cavity effectually prevents the action of the medicine on the aching nerve.

Cold and La Grippe Remedy.

Ext. Rhei pulv.	
Ext. Rhamni Pursh. pulv., aa.....	3iv
Camphorae pulv.	3vi
Quininae sulfatis.....	3ii
Cinnamomi pulv.	3i
Asafoetidae pulv.	3v

Powder the Camphor with the assistance of a little Alcohol or Ether and when dry, add the Cinnamon and triturate until all lumps are removed. Then add the other ingredients and mix thoroughly. This is a most effective remedy and should replace nearly all of your patents of a similar nature.

The cost of this mixture per troy ounce is 11c and it is to be put up in capsules of 5 grains each (a No. 2 capsule) and an average adult dose is two capsules every four hours.

Two capsules, or 10 grains, represent one grain of the combined extracts, three-fourths grain Camphor, two grains Quinine, one grain Cinnamon, and five grains of Asafoetida.

By dispensing 24 capsules in each 25c size, the cost of one box is about 5c, and if 36 capsules are put in each 25c size the cost is about 8c apiece.

A little cotton in the box is of assistance to keep the capsules clean and dry.

CHAPTER XXVI.

Many druggists find it of great assistance to guarantee their domestic remedies, not because they have faith in their infallibility, but because it keeps their customers good natured.

There is, however, only one way to use a guarantee, for it may do you more harm than good if improperly used. A guarantee should be a bond of honor, no more, no less.

The Guaranty.

This guarantee may appear as a plain statement on a printed slip and accompanying the package, or it may be a verbal guarantee, made at the time of the sale.

A customer comes in and wants a good cough syrup. He has heard such a one was good; another has been highly praised in the newspapers; his neighbor uses a third kind; but have you anything better, Mr. Druggist, something that really is good.

This is probably an extraordinary occasion, but the retail pharmacist is more often gauged by what he sells and recommends than he might imagine.

You reach for a 50c bottle of your cough syrup, tell your customer you put it up yourself, that it contains nothing injurious, is made from strictly fresh and pure drugs and you are selling it upon its merits alone, and that should it not prove satisfactory, you will return the 50c.

Should the medicine prove satisfactory, your customer will gladly advertise it for you. However, it may do no good and still it may never be mentioned again by your customer who continues trading with you as heretofore.

But if it has proven unsatisfactory and he does mention the fact, go to your cash box for 50c and hand it to him, saying that you are very sorry that no benefit was received and feel that you have no claim upon the 50c. Don't ask how it was used, but diplomatically turn the conversation upon another subject as soon as possible and forget the incident.

There are only two clearly defined courses to pursue: Guarantee with a firm conviction that the guarantee is your bond of honor, or just sell it for a 50c cough medicine. Don't mince or mix matters, don't talk for the 50c, act your principles, that's business.

Headache Powders.

Caffeinae Citrataegr. LXXV
Cinnamomi pulvisgr. L
Acetphenetidinigr. C
Sodii Bicarbonatis
Magnesii oxidi, aa.....gr. CC.

Mix thoroughly and divide into 100 powders, each powder weighing a little over 6 grains. The heavy calcined magnesia should be used, not the light, as it is too bulky and does not mix as well.

These powders may be dispensed in various ways, a 25c size being preferably put up in wafer or konseal form, 12 to each box. If put up in capsules or powders, 15 should be dispensed in a 25c package.

The cost of the above amount, 100 powders, is about 11c and when put up as konseals, 12 to the box, 25c size, will cost complete about 65c per dozen boxes, put up in a good shouldered powder box and labeled.

Put up 15 in a box as powders or capsules, a dozen boxes would cost about 40c, using a good quality white sliding box. This is an excellent headache powder, far superior to most others and contains nothing harmful.

Corn Cure.

Acidi Salicylici3vi
Acidi Lacticif 3xii
Alcoholisf 3xii
Fluidextracti Cannabis Indicaef 3liiss
Aetherisf 3xii
Collodion flexile, q. s. ad.....f 3xlviii

Dissolve the Salicylic Acid in a mixture of half each of the Alcohol and Ether and add the Lactic Acid, which should be concentrated. Then add the Fluid Extract to the mixture of the balance of the Alcohol and Ether and mix the two solutions, and add enough Flexible Collodion to make 48 fluid ounces.

If ordinary care is taken in preparing this mixture and it is kept securely corked it will not thicken. It makes a very efficient corn and callous remover.

It should be put up in 3 or 4 dram vials and preferably with a brush attached to the stopper, to retail at 25c.

If these vials, including a cork with brush cannot be procured, a camel's hair brush can readily be inserted into an XXX cork, by making a slit in the cork with a pen knife, or a brush can simply accompany the bottle.

The directions should read: "To paint the corn every evening for 6

nights closing the bottle with the finger while in use, and on the seventh day to soak the corn in hot water, etc.

One pint of this Corn Cure costs about 75c and will give good satisfaction.

Hair Tonic.

Lappa	℥xii
Salvia	℥iv
Pilocarpus	℥viii
Hydrargyri chlor. corr.	gr. xvi
Cantharidis pulv.	gr. Lxiv
Resorcinolis	℥i
Glycerinae	℥℥iv
Alcoholis,	
Aquae,	
Perfume, aa q s.	Cong. i

Make 4 pints of an infusion with the Burdock, Sage and Jaborandi, by enclosing the drugs in a bag, suspended in the water, and keeping it hot for thirty minutes. Express and strain when cold.

Mix the Corrosive Sublimate and Cantharides with 4 pints of Alcohol and add the following perfume: Oil Bay, one dram; Oil Cloves, thirty minims; Oil Lavender, one dram; Oil Lemon, two drams; Oil Spearmint, one-half dram.

Shake this alcoholic mixture occasionally for three days and then gradually add to it the infusion.

To the mixture add the Resorcinol and Glycerin, allow to stand seven days with occasional agitation and then filter, perfectly clear.

This Tonic is a very good preparation and can be highly recommended. It is to be used once a day, and the label should state that the scalp should be washed once a week in tar-water.

One gallon costs about \$2.10. It may be put up in 6 oz. short blake bottles with sprinkler top, and readily retails at 50c, or it may be sold in fancy, so-called "toilet-water" bottles, with a colored label.

The cost per dozen is about \$1.60.

CHAPTER XXVII.

The following three preparations are to be made for sampling physicians with, as per Chapter XXVII in the propaganda department:

Elixir Corydalis compositus, N. F.;
Elixir Glycerophosphatum, N. F.; **Liquor Cresolis Compositus, U. S. P.**

These preparations are important ones and when made right and from pure drugs, are of great value to the physician.

1.—Elixir Glycerophosphatum, N. F.

Sodium Glycerophosphate (75%)	25	Gm.	\$0.17
Calcium Glycerophosphate	8.75	Gm.	.05
Phosphoric Acid.....	8.	Gm.	.01
Glycerin	300.	Cc.	.15
Aromatic Elixir	300.	Cc.	.08
Distilled Water,			
q. s. ad,	1000.	Cc.	.02

1000 Cc. cost \$0.38

What capable pharmacist will say he cannot make this simple solution as well or better than any proprietary manufacturer, and make it with strictly pure and reliable, full strength ingredients?

"It costs you about 18c to make a pint, and the very lowest price per pint from a manufacturer is in the neighborhood of 55c.

Dissolve the Sodium salt in the Distilled Water (warmed) in a mortar. Mix the Calcium salt with the Glycerin, gradually added, and to this add the Sodium Solution, and then the Phosphoric Acid. Now add the Elixir and finally enough Distilled Water to make 1000 Cc.

Allow to stand a day or longer and then filter, wetting the filter paper with distilled water.

2.—Elixir Corydalis Compositum, N. F.

Fluidextract Corydalis..	60 Cc.	\$0.30
Fluidextract Stillingia...	60 Cc.	.15
Fluidextract Xanthoxylum	30 Cc.	.10
Fluidextract Iris.....	90 Cc.	.25
Alcohol	125 Cc.	.08
Potassium Iodide..	50 Gm.	.25
Aromatic Elixir, q. s.		
ad	1000 Cc.	.20

1000 Cc. cost \$1.33

In a mortar, incorporate about 15 Gm. of Purified Talc with the Alcohol and gradually add the Fluidextracts in the following order, stirring constantly: Iris (Blue Flag), Xanthoxylum (Prickly Ash Bark), Corydalis (Turkey Corn), Stillingia. Now add gradually 600 Cc. Aromatic Elixir, let the mixture stand a few days and filter. In the filtrate dissolve the Potassium Iodide and lastly add enough Elixir to make 1000 Cc.

The filter paper should be moistened with Diluted Alcohol, and the first part of the filtrate returned until it runs perfectly clear.

Made by Percolation.

This Elixir can also be made by percolation, as follows: Reduce the drugs (8 oz.) to a No. 40 powder and moisten with $2\frac{1}{2}$ oz. of a menstruum composed of 16 oz. alcohol and 12 oz. water, and macerate two hours.

Then pack in a cylindrical percolator, moderately firm, and proceed as directed in percolating any fluidextract or tincture.

Percolate to 27 fluidounces, add $6\frac{1}{2}$ oz. Sugar, the Potassium Iodide and two drams of Compound Spirit of Orange; then agitate frequently for a few days and filter.

3.—Liquor Cresolis Compositus, U. S. P.

Cresol	500 Gm.	\$0.32
Linseed Oil, raw.....	350 Gm.	.06
Potassium Hydroxide..	80 Gm.	.06
Water, q. s. ad.....	1000 Gm.	.00

1000 Gm. cost \$0.44

If the drugs are right and the following directions closely followed, a perfect preparation will result, one that is not irritating and perfectly soluble in water.

Warm the Linseed Oil, contained in a rather large casserole or other deep, capacious vessel, to about 150 deg. F. Dissolve the Potassium Hydroxide in 50 Gm. of Water, also warmed to about 150 deg. F., add it to the Linseed Oil and mix thoroughly.

Now incorporate one ounce of Alcohol with this mixture and continue a gentle heat until saponification is com-

plete, however without any further stirring. Saponification is complete when a small portion of the mixture, added to boiling water (preferably in a test tube), shows **no** separation of oily drops. By this time all of the alcohol has evaporated and to this perfect soap is then added the Cresol, gradually, thoroughly mixing, and enough Water to weigh 1000 Gm.

500 Gm. Cresol measures 484 Cc. 350 Gm. Linseed Oil measures 376 Cc. The finished product, however, should be weighed (1000 Gm.)

CHAPTER XXVIII.

As a very desirable addition to profit-making sales in a drug store, flavoring extracts rank high. In fact, this business is just as desirable as the sale of domestic remedies, just as profitable, and they are one of the best drawing cards a drug store can have.

How it ever came about that this department of *Materia Medica* has become disassociated from present day pharmacy is immaterial now. What we want is to restore it where it belongs.

Flavoring extracts and spices are legitimate stock in pharmacy. They are recognized in the *Materia Medica* of all nations, and the grocerian sells them.

Why should the pharmacist sell them? First, because the ingredients and apparatus for making are found in every pharmacy; second, they are easily made; third, their sale is profitable; fourth, they are a good drawing card for general business when once introduced; fifth, their making requires no special outlay for apparatus, and they can be advertised in your regular advertising mediums.

Comparison of Sales.

To compare the sales of flavoring extracts with the sale of your best seller in the domestic remedy line would weigh heavily in favor of the flavoring extracts.

Taking cough syrup as illustrating your best seller and a total of 500 families living in "your" territory, what are the conditions?

Cough Syrup sales average not more than one sale per year for every other family, while nearly every family will use at least three two-ounce bottles of flavoring extracts, as Vanilla, Lemon, etc., in the course of a year.

The profit on 250 bottles of cough syrup (100 fifty cent size and 150 twenty-five cent size) is never over \$75; the profit on 1,500 bottles of flavoring extracts, 25c size is always over \$150.

Cough Syrup sells well for about five months each year and is an indirect trade-winning proposition for this length of time only; flavoring extracts sell well twelve months each year and are therefore a constant advertising proposition.

Still you will not do without your cough syrup, so why should you do without the more profitable extract business, the sale of which is legitimately yours?

This neglected sale of flavoring extracts is one more link in the chain that the druggist has allowed other interests to forge around his neck; he has been working away from the laboratory instead of towards it.

The formulas here given are tried and true, free from tedious processes and experimentation, and while they might be improved upon, they have proven themselves good sellers and repeaters.

Flavoring Extract Vanilla.

Vanilla, true Mexican.....	℥viii
Vanilla, Bourbon	℥xvi
Vanilla, Tahiti	℥xvi
Rock Candy, powdered.....	℔biii
Alcohol	Cong. iss
Water	Cong. i

Use only seven inch beans of each kind and do not substitute sugar for the rock candy.

Cut the beans as fine as possible with a sharp and bright knife, it being very important that this knife be not only bright, but polished and shining.

Now mix the beans with the rock candy, preferably in a wooden cask with an open top and provided with a well fitting cover—then pour upon this mixture the alcohol and water, and stir at least once a day for three months, keeping tightly covered.

Quantities under two gallons can be prepared in a bottle.

Do not use or sell before three months of maceration, as it takes that length of time before a fairly good aroma develops, and allow it to macerate as much longer as possible.

Then percolate, in a glass percolator, regulating it so it will drop quickly, or at best in a very fine stream. Press out the residue, but do not add any fresh menstruum.

The result will be 2½ gallons of absolutely pure Vanilla extract, brilliant and clear, and of fine aroma.

The cost of this extract is about \$5.60 per gallon, or 70c per pint.

Put up in 2-oz. size only, retailing at 25c. Use the kind of bottle called "flat extract," a high, clear glass bottle, without panels.

A Vanilla Extract made with the very best grade of Mexican Vanilla bean only, has so far proved a failure from a "general public" viewpoint. An epicure wants it and recognizes it, but the general public want and are only satisfied with an extract similar to the above.

This may be responsible in a great measure for the small sales of flavoring extracts over the druggists' counter.

Next to Vanilla, Lemon Extract is the most popular for ordinary household purposes.

Flavoring Extract Lemon.

Oil Lemon, best.....	f ℥xii
Alcohol	O xii
Lemons	xviii
Water, q. s. to make.....	Oxiv ss

Use only the best grade of oil obtainable, buying it in original coppers. Mix the Oil with the Alcohol, and add to this mixture the yellow rind, grated from off the peel of the eighteen Lemons.

Do not neglect this, as it is the most important part of the process, for without the rind of **fresh, ripe** Lemons, the best part of the flavor is lost, as is also the genuine lemon color.

Now express the juice of the Lem-

ons, add enough water to it to measure two pints, and then add this juice to the alcoholic solution **gradually**, let stand a day, and filter.

This is a most excellent Lemon Extract, 2-oz. bottles retailing at 25c and it is a repeater.

CHAPTER XXIX.

Continuing the subject of Flavoring Extracts, there are two classes of trade to cater to: the domestic demand for household purposes in two and four ounce sizes, and the large users, such as hotelkeepers, bakers, bottlers, etc., who buy in gallon lots or over.

Go for both of these very desirable classes with a vim; they are worth having, but you must meet competition, and if you will correctly size up your field, you should be able to make satisfactory prices.

To this end we append extra formulas in the case of Vanilla and Compound Vanilline extracts, whereby almost any price can be met and a strictly legitimate article be sold.

Extract Vanilline Compound.

Vanilline	3i
Cumarin	gr.xl
Alcoholis	f3xv
Aromatic Solution (see below)...	f3xv
Sacchari albi	3xviii
Glycerinae	f3xviii
Tr. Persionis Comp., N. F.....	f3ivss
Aquae	Ovi

Dissolve the Vanilline and Cumarin in 15 oz. Alcohol. Then dissolve 72 minims Oil Sweet Orange, 48 minims Oil Lemon, 18 minims Oil Sassafras, 24 minims Tincture of Musk, 3 minims Oil Mace, 3 minims Oil Cloves, 6 minims Oil Fennel and 6 minims Oil Cassia in 15 oz. Alcohol.

Mix these two alcoholic solutions, add the Glycerine, Tincture, and then the Water, gradually. Lastly add the Sugar.

To this mixture add one pound of the choicest Raisins, cut, and macerate for one month and filter. While this may take a little time and trouble, it produces a rich looking preparation,

with a fine aroma, that increases in delicacy and bouquet with age wonderfully.

Samples six years old are so well blended and have such a distinctive odor, that families using it would not want to be without it.

When sold it should of course be sold for what it is, and labeled accordingly, in compliance with the pure food and drug law.

Many pharmacists may think that in selling such a flavor they are selling an imitation Vanilla; such, however, is not the case.

You are making a flavoring extract from well known drugs and chemicals, mostly official, and are selling it for what it is—just as legitimate a proceeding as selling your own cough syrup made after your own formula.

The cost of this Compound Vanilline Extract is about \$1.75 per gallon.

Four Grades of Flavors.

Now by taking three parts of the Flavoring Extract Vanilla mentioned in the previous chapter, and one part of this Compound Extract, you produce an Extract costing about \$4.60 per gallon.

By mixing these two extracts in equal parts, the cost per gallon is about \$3.65, and by mixing three parts of the Compound with one part of the Vanilla extract, the cost per gallon is about \$2.70.

You are now thoroughly equipped, as far as Vanilla and Vanilline Compound Extracts are concerned, to beard the lion in his den.

Sampling.

With a two-ounce sample of each kind, and also a sample of Lemon, you visit your prospective customer and have a "heart to heart" extract talk with him, leaving the samples for his use, with prices.

These samples represent really four grades of Vanilla, but you must be frank and state the composition of the compound ones, and also label them as "Compound."

These latter, of course, are not injurious in any way, being simply good

flavoring extracts that in a way supplant the extract from the more expensive bean.

The main idea is for you to sell a very fine class of extracts, high grade in every respect, strictly legitimate and conforming with the law and with which you have every assurance of beating down competition.

Pharmacists must become more active and aggressive business men, not only to regain lost ground, but to prevent any further legitimate business slipping away from them.

With the conclusion of this article on flavoring extracts in the next chapter, we hope to have given retail pharmacists enough information on this valuable subject to enable them to begin an aggressive campaign to secure this very desirable class of patronage.

CHAPTER XXX.

In case a demand for other flavoring extracts should be brought about by the persistent advertising of your vanilla extracts and lemon, the following formulas will produce satisfactory products:

Orange.—Proceed exactly as given under Flavoring Extract Lemon in Chapter XXVIII, page 54, substituting Oil of Orange, Orange peel and Orange juice, respectively, for the Lemon, and following each and every detail there given.

Flavoring Extract of Lemon costs about \$3.20 per gallon to make, while Orange flavoring costs \$3.75 per gallon.

Flavoring Extract Wintergreen.

Oil Wintergreen, true.....f 3i
Alcoholf 3xv
Waterf 3iv
Tincture Grassf 3i

Exclude from the light as much as possible.

Tincture of Grass is prepared by filling any convenient sized vessel with clean, green grass, pressed down firmly and covered with alcohol, macerate a few days and filter into an amber colored bottle.

Should a red color be desired, a good one is produced by adding a sufficient amount of Tincture of Alkanet (25%) made with 75% Alcohol.

Flavoring Extract Almond.

Oil Bitter Almond (free from
H C N)f 3iss
AlcoholOiv
WaterOiv

Mix and filter after standing a few days.

Flavoring Extract Cinnamon.

Oil Cassia, pure.....f 3iii
Alcoholf 3xxiv
Waterf 3viii
Ceylon Cinnamongr. xxx

Mix and filter after standing two days, with occasional agitation.

Flavoring Extract Rose.

Oil Rosef 3i
Oil Clovesgtt vii
Rose petals3i
Alkanet rootgr. x
Alcoholf 3xxiv
Waterf 3viii

Macerate 2 days and filter to 2 pints.

The small amount of Oil of Cloves here added is just enough to develop and enhance the rose flavor. The rose petals act in much the same way as does the Lemon Peel in Lemon flavor, or Cinnamon in the above extract, viz., holding the flavor more permanently and adding freshness.

Neither of these desirable qualities can be secured in any other way.

Pistachio.

This flavor is a mixture and very few are found alike. A most satisfactory one is made as follows:

Oil Orange, sweet.....f 3iv
Oil Lemonf 3ii
Oil Nutmegf 3iss
Oil Sassafrasf 3i
Oil Clovesminim xx
Oil Almondminim xv
Extract Vanilla, to make.....f 3xxxii

One of the mixtures of Vanilla Extract with Vanillini Compound may be substituted for the Vanilla in the above.

The following three flavors are purely artificial and have never been popular; their use will probably continue to

decrease as fruit juices become better known:

Pineapple.

Amyl-butyrate	f 3viii
Ethyl-butyrate	f 3v
Chloroform	f 3i
Aldehyd	f 3i
Glycerinae	f 3iv
Alcoholis	f 3c
Pineapple Juice	f 3lxiv

Mix, and allow to stand one month before filtering and using.

Banana.

Aldehyd	f 3i
Chloroform	f 3i
Amyl-butyrate	f 3viii
Ethyl-butyrate	f 3v
Glycerinae	f 3v
Alcoholis	Cong. i
Water	3xxxii
Bananas, mashed	No. xxiv

Macerate 2 days and filter. Can be sold within one month.

Strawberry.

Spirit Nitrous Ether	f 3vi
Acetic Ether	f 3v
Glycerinae	f 3iv
Amyl acetate	f 3i
Oil Gaultheria	f 3i
Ethyl-butyrate	f 3v
Alcoholis	f 3c
Strawberry Juice	f 3lxiv

Mix and allow to stand for a month before filtering and using.

This completes the list of the more commonly called-for flavors.

Now put up or have put up for you a line of spices in the popular sizes.

Tea is another article peculiarly fitted for your trade and many pharmacists already have a very nice trade on it.

Chocolate is in the same class, and if you sell chocolate candies, why not sell the whole line, including cocoa and manufactured chocolate for family use.

Now add just one more, and your list is complete. Honey, put up in attractive packages, is a good seller.

By observing the manner of advertising these various articles in one of the chapters on advertising in this volume (Chapter XXI), you will see what a wonderful lever you have to make business come your way.

CHAPTER XXXI.

The three preparations to be next prepared for continuing the propaganda work are Essence of Pepsin, N. F., Compound Tincture of Viburnum, N. F., and Compound Resorcin Ointment, N. F. By following the simple official directions and using none but absolutely pure U. S. P. drugs, no trouble will be experienced in their manufacture.

Essentia Pepsini, N. F.

Pepsin	22.5 Gm.	\$0.20
Rennin	16.5 Gm. ....	.30
Lactic Acid	2. Cc. ....	.01
Tr. Orange Peel	10. Cc. ....	.01
Glycerin	125. Cc. ....	.07
Alcohol	50. Cc. ....	.04
Syrup .....	.65. Cc. ....	.01
White Wine Ang	365. Cc. ....	.17
Purified Talc	15. Gm. ....	.01
Water, q. s., ad.	1000. Cc. ....	.00

1000 Cc. Cost \$0.82

This is a cost of approximately 40c per pint.

The Pepsin and Rennin are dissolved in 300 Cc. of Water with the aid of the Lactic Acid and occasional agitation; then add the Syrup and Glycerin.

Mix the Orange Tincture with the Alcohol, and to this gradually add the Wine, and then add this alcoholic mixture to the above solution of Pepsin.

Finally add sufficient Water to make 1000 Cc, incorporate the Purified Talc. and shake the mixture occasionally for 24 hours, and filter, perfectly clear.

If possible, a longer period of time should be allowed before filtration, in order to assist both clarification and filtration.

Pumice stone is approved by many as superior to Talcum in filtering this Essence, as it materially hastens the process.

However, if care is taken to mix the ingredients as above stated, if a few days be allowed before filtering and a proper sized funnel be used in which the filter paper has been moistened with water containing 10 per cent Alcohol no trouble will be expe-

rienced, the filtrate running quickly and clear.

The first portions of the filtrate should be returned if not perfectly clear, and the utmost care should be exercised to prevent the filter from becoming overfilled with the unfiltered essence, as one drop of contamination is often sufficient to spoil a gallon lot as regards clearness.

The Angelica Wine used should preferably be of domestic production, of a pale amber or straw color with a pleasant odor and an agreeable, fruity taste. It should be labelled "Angelica Wine," and it should be guaranteed, or you must refuse to accept it.

Tinctura Viburni Opuli Composita, N. F.

Viburnum opulus.....	35 Gm.	\$0.05
Dioscorea.....	35 Gm. ....	.02
Scullycap.....	10 Gm. ....	.01
Cloves.....	50 Gm. ....	.03
Cinnamon.....	65 Gm. ....	.06
Glycerin.....	65 Cc. ....	.04
Alcohol, (about 1000 Cc.).....		.65
Water, q. s. ad.....	1000 Cc. ....	.00

1000 Cc. Cost \$0.86

Being approximately 40c per pint.

These drugs should be reduced to a moderately coarse (No. 40) powder, although a finer powder (No. 60) would be more appropriate, as it would assist in a more thorough exhaustion of the drugs and the percolate could be more easily controlled.

Mix the Glycerin with 750 Cc. of Alcohol and moisten the mixed powders with 150 Cc. of the mixture, place in a percolator, allow to stand for one hour.

Then pack firmly and add enough menstruum on the powder to saturate it and leave a stratum on top. When percolation begins, close the lower orifice and macerate 48 hours.

Now continue the percolation with the remainder of the menstruum, and follow this with a menstruum consisting of Alcohol 5 parts and Water 1 part (by volume) until 1000 Cc. of Tincture are obtained.

It is imperatively necessary that each and every one of the above drugs be absolutely up to the standard, and while Dioscorea (Wild Yam) is not official, no difficulty should be experienced in securing the true root.

Unguentum Resorcini Compositum, N. F.

Resorcinol.....	6 Gm.	\$0.02
Zinc Oxide.....	6 Gm. ....	.01
Bismuth Subnitrate.....	6 Gm. ....	.03
Oil of Cade.....	12 Gm. ....	.01
Paraffin.....	10 Gm. ....	.01
Petrolatum.....	25 Gm. ....	.01
Wool Fat, Hydrous.....	35 Gm. ....	.02

100 Gm. Cost \$0.11

First reduce the Resorcinol to an impalpable powder; this is very important, not only with Resorcinol, but in the case of every ointment that has crystalline salts or lumpy solids; these must always be reduced to an impalpable powder first.

Now mix the three above powders, preferably by means of a spatula, and make a perfectly smooth ointment with a small quantity of Hydrous Wool Fat; this is the most important part of the process, namely, continuing the trituration until all lumps are rubbed smooth.

The balance of the Hydrous Wool Fat is now to be incorporated, then the Paraffin and Petrolatum (previously melted together), and lastly, the Oil of Cade.

Now mix the whole intimately, continuing the trituration until the ointment is perfect.

The ointment must be preserved in substantial vessels, protected from light and air.

The surface of this ointment will become darker in color with age, but this is not at all detrimental to its therapeutic activity.

It is owing to the action of the light and air on the Resorcinol, and probably also to the action of the Sulphur compounds thought to exist in the Oil of Cade on the Bismuth salt, gradually producing the dark Sulphide of Bismuth.

CHAPTER XXXII.

The pharmacist must always lay great stress upon the quality of drugs and medicines which he purchases.

The importance of this subject can hardly be overestimated, as every drug that leaves your hands is bent on a mission of health and life.

Just to bring home to some weak-kneed member of the pharmaceutical fraternity the importance of quality we will suppose that your boy is taken sick and you call your physician.

He discovers that your boy has a very high fever, a well developed case of tonsilitis and the neighborhood has several cases of diphtheria.

You are alarmed naturally for the safety of your boy, and well you might be, for he is very sick and in danger.

The physician prescribes as follows:

℞ Antipyrinae 3ss
Sodii Salicylati 3i
Syr. Aurantii f 3iv
Aq. Menth. pip., ad. f 3ii

M. Sig.—One teaspoonful every hour.

℞ Liquor Antisepticus Alk.,
N. F. f 3iii

Sig. No. 1.—Spray throat every 30 minutes.

℞ Aq. Hydrogenii dioxidi,
Aqueae, aa. 3ii

M. Sig. No. 2.—Spray throat every 30 minutes alternately with No. 1.

Here is a typical case where medicine will effect a speedy recovery, excepting possibly the additional applications of ice to the throat.

You hurry down to your store and fill these three prescriptions yourself; how careful you are to weigh off just 30 grains of Antipyrine; you have two kinds of Sodium Salicylate, but you take the very best and purest kind you have for your boy's life is at stake; how exact and careful you are, no possibility of your boy getting anything but the real genuine thing.

The Best is None Too Good.

You fill a three-ounce bottle with Alkaline Antiseptic that you know is exactly according to the N. F., and you will even open a fresh bottle of

Peroxide of Hydrogen if necessary to be absolutely sure that you have everything right.

Your boy gets well. Why? Because the physician has prescribed just what was needed and you have dispensed the highest grade of medicine for the case.

Now then, don't you believe that every father loves his son every bit as dearly as you love yours, and is not your customer's child entitled to exactly as much consideration as regards the purest kind of medicine as is your son?

Do to others as you should to your own; they are entitled to it and you can see that you have absolutely no moral or legal right to furnish anything but the "very best" for the sick.

Preservation.

It is for this reason that the author will endeavor, in the next few chapters, to give information as to how various drugs and preparations should be preserved, that they may always be in a high state of therapeutic efficiency.

We are supposing, naturally, that the pharmacist has the necessary skill to prepare medicines correctly in the first place, and is able to purchase and select first-class drugs; the great problem then is, to keep them so.

Your store room should be so arranged that dust and dampness will always be a minimum quantity; sweeping should be done on hygienic principles and transoms and ventilating apparatus should be used understandingly; then preservation is much more easily possible.

The great truths about preservation are: First. Protect everything from the air; second, protect it from the light; and third, keep as cool as possible; fourth, dust and dampness must be guarded against.

These are primary and all important considerations and, with the exceptions as noted in this and future chapters, should be carefully attended to.

We believe it should be the function of the Pharmacopoeia to give this information, as it seems to be of fully as

much importance to **keep** a thing up to standard as to **make** it or select it of standard quality.

Waters.

Beginning with the waters, the prime considerations are to keep the bottles containing them in a cool place, excluded from the light and corked securely. All distilled and aromatic waters should be made or purchased in quantities suitable for a reasonable demand; the supply should be gauged so as to last not longer than one year.

Their very nature prohibits stability and permanency, and while some keep longer than others, it should be made a fixed rule to anticipate your wants for not longer than one year.

A flocculent precipitate is the first sign of deterioration, and when it appears it should at once be filtered out; should this again appear it will not be a long time before the usually agreeable odor of the water disappears.

Exception is made in the case of the Distilled Water of the Pharmacopoeia; also the Stronger Orange Flower Water and Stronger Rose Water which should be **loosely stoppered** with a pledget of purified cotton, and the respectively weaker U. S. P. preparations of these stronger waters should be freshly made.

While the ordinary cork is permissible for all waters, in the case of the Ammonia waters the bottle should be stoppered with a glass stopper and extra precautions should be taken with Stronger Ammonia Water and bottles containing this should never be completely filled, owing to the danger of explosion.

The custom of purchasing Stronger Ammonia Water in the fragile and brittle stone jugs without protection is a most reckless one and should be condemned.

Chlorine water should also be kept in glass stoppered, amber colored bottles or the bottle may be stoppered with the ordinary cork, if it has previously been immersed in hot melted paraffin.

Peroxide of Hydrogen, owing to its great importance, should have more

care than is ordinarily given it. A six months' supply should be the limit, it should never be shaken and as soon as the supply is received, the cork should be removed from the bottle and be replaced by a pledget of purified cotton.

Contrary to general expectations, when a solution of Peroxide of Hydrogen is exposed to the air, it does not lose its Peroxide, but it is the water which evaporates chiefly.

Chloroform water should always have an excess of Chloroform in the bottle containing it. As Chloroform is soluble in about 200 parts of water, about one fluidram is sufficient for one pint of the water. It should be kept in a cool place and in dark amber colored bottles.

Wherever possible, a distilled aromatic water should be given the preference, as such always possess a more agreeable flavor than when they are made by solution of the volatile oil in water.

The Pharmacopoeia also gives permission to make aromatic waters by dropping the volatile oil on filter paper (pulped or shredded), adding this to the very hot water, allowing to cool and filtering.

CHAPTER XXXIII.

The preservation of drugs and preparations, as stated in the previous chapter, is mostly a matter of using common sense.

The forces at work spoiling your stock are not many, but they are powerful ones—light, air, heat and moisture, and the bacterial vegetation produced by two or more of these forces.

Everything in your stock is affected by one of these agents and sooner or later will ruin it; everything is perishable, the inanimate as well as the animate and drugs naturally share this condition of things.

They become stale, lose virtue and finally, in the course of time, are rendered worthless.

Hence the anticipation of your wants for a reasonable length of time only

will materially assist in keeping your stock in A No. 1 condition—in other words, you should be “a good buyer.”

The pharmacist of today must be awake and conscientious; times are changing and you must get into the habit of having “everything” with which your name is connected “first class.”

Some day in the future, possibly in the near future, an inspector will call upon you with more or less frequency, and with a whole lot of authority, to inspect your stock.

The First “Legal” Step.

The Pure Food and Drug Law is a fair beginning of this, but this will not be a marker to conditions twenty years hence.

This is only a prophecy, mind you, but look it squarely in the face. It may be some time before it is realized, but it will also take some time to prepare for it, so let's begin now.

We believe, therefore, that the United States Pharmacopoeia should give the pharmacist information of a reliable character as to how drugs and preparations should be preserved, not only for a few articles, but for all of them.

This information is found in no text-books, it is taught in no schools and it is nowhere discussed; and the information is of a kind that is absolutely necessary, as every druggist knows.

You see the people are getting so that they will have what they pay for—by the way, a very legitimate proceeding, is it not?

They will no longer let you sell them herbs, whose entire volatile constituents have disappeared from years of keeping; roots that are worm eaten and have had no virtue for years; etc.

This subject of preservation brings another important subject before the retail druggist, and that is the fixtures in his place of business.

It is perfectly proper, of course, to make a good display of shelf bottles, etc., in your store room, but don't keep such drugs and preparations in

them that are affected by the light, unless these are in blue or amber colored bottles.

Your first thought should be to put these drugs and preparations where they belong; they are not for show, but for duty.

You can readily understand, if you study the subject, that many articles which adorn your shelves should be in the dark, some out of sight and many in a cool place.

Vegetable Drugs.

Keep all herbs and botanical drugs in tin whenever and wherever possible. Few of them can be properly preserved when exposed to sunlight, and this is doubly true of powders contained in the customary glass labeled shelf bottles.

Those that are kept in wooden drawers, must have extra care. The drawers should be lined with heavy paper attached with a good paste containing about 10 per cent of alum; this keeps out insects, but will not destroy any insects already in the drug.

The new style of drawers put out by some firms at the present time are calculated to do away with all dust, insects, moisture, etc., and are even mouse proof, and are very desirable and should be installed at the earliest favorable opportunity.

Cerates, Ointments, Etc.

All fatty substances should be preserved in glass, stoneware or porcelain jars. No exception to this should ever be allowed.

All containers should be kept scrupulously clean at all times on the outside, should always be covered and should **always be kept in a cool place.**

Here is noted one peculiarity of many druggists in which they differ from every other species of the genus homo: common sense, experience and loss of money and custom tell them that all ointments, cerates, etc., should be kept in a cool place, but each succeeding summer finds them with many of these preparations in a semi-liquid condition.

There is absolutely no need of this, nor any excuse for it, and shows that we are not as sensitive to our duties as pharmacists as we should be.

When we open a new store, and every store was once a new one, we do not make any provisions for cold storage, as a pharmacist should. One drug is treated exactly like every other one, and all are kept at the same temperature. This, however, is a subject for future discussion.

When an ointment jar has been emptied, it should be thoroughly cleaned, otherwise any rancidity which might have been in the old ointment will also cause the new lot to become rancid very quickly.

Hot water and soap is the best cleansing agent for an ointment jar, after clean sawdust has been used in removing any remaining grease.

In manufacturing ointments containing iodine, mercuric chloride, tannic or salicylic acids, or other metal-attacking chemicals, a thin, pliable horn or rubber spatula should be used.

Iodine and Diachylon Ointment should be freshly prepared as wanted, as also the Ointment of Potassium Iodide.

Ceratum Cantharides, U. S. P.

Cantharides	320 Gm.....	.57
Yellow Wax	180 Gm.....	.18
Rosin	180 Gm.....	.02
Lard	170 Gm.....	.06
Liquid Petrolatum	150 Gm.....	.05

1000 Gm. cost \$0.88

Cost per pound 40c. When this is made according to the pharmacopoeial directions a most excellent and serviceable preparation results.

Proprietary houses charge as high as 90c and \$1.60 per pound for this preparation and you do not know how good it is when you purchase it ready made.

CHAPTER XXXIV.

In the previous chapter mention was made of the fact that pharmacists generally were not alive to the fact that a drug store needs a cold storage room

or a very large refrigerator of some kind.

If druggists generally would consider when opening a new store or buying out an established one, that they are going into a place where they will spend their entire life, it is reasonable to suppose they will give every possible consideration to the arrangement of fixtures.

The convenience of having time, trouble, labor and worry-saving devices can not be overestimated from a financial standpoint. It adds years to your life, it keeps a constant smile on your face which your customers can appreciate, and, in fact, it brings to you most of the good things you will get in this life.

Among the most important of these conveniences is the cold storage room or large refrigerator. Every pharmacist must admit that the actual money loss in drugs and the indirect loss of custom from deteriorated drugs amounts to a much greater sum every year than the amount needed for ice to cool the refrigerator.

Preservation of Syrups.

In the first place make only a sufficient quantity of a syrup to last a reasonable length of time, say four months, unless you have special facilities for storing them (as the above mentioned refrigerator).

Even with special facilities, it is always advisable to store syrups in small containers; pint bottles should be the largest, even if the quantity made is large.

The containers used should be the common packing bottles and they should be stoppered with rubber corks, as this insures easy removal and cleanliness at all times.

It must not be forgotten that using strictly pure cane sugar and making your syrups **exactly** right, is of the greatest assistance in preserving them.

Should you be so unfortunate as to have a syrup spoil on you, make use of sufficient moral courage to consign it to the sink or waste pipe.

You cannot make it right by reboil-

ing it or making it over, so do not attempt it.

Some syrups require more attention than others; for instance, Syrup of Acacia, U. S. P., Syrup of Garlic, N. F., Syrup of Marshmallow, N. F., Syrup of Almond, U. S. P., and Syrup of Orange Flowers, U. S. P., should be kept in small bottles (about 4 oz.) securely corked, and in a cool place. This should be made a rule with these syrups and it should never be deviated from.

Syrup of Iodide of Iron as made according to the latest Pharmacopoeia (8th revision) is a very stable syrup and the old-time precautions need not be taken with it to preserve it properly, as placing a bright nail in the syrup, or keeping it on a window shelf, etc.

Preserving Fluid Extracts.

Fluid extracts should be kept at as near a uniform temperature for the entire twelve months as is possible. They should be kept in securely corked but not in glass stoppered bottles.

Some precipitation is liable to occur in all fluid extracts and usually consists of inactive extractive matter. This is caused, when made in summer, by the warm menstruum, which has greater solvent action than a cold one, and as cold weather comes, the excessive amount of extractive is thrown out of solution.

Another reason is that many drugs contain a certain per cent of moisture, consequently the first portion of the percolate is somewhat weaker in alcoholic content than the last portion, which may finally result in precipitation.

Imperfect corks are probably the most frequent cause of precipitation and also of evaporation; hence all corks used in closing a bottle containing fluidextract should be coated with hot paraffin, petrolatum or glycerin.

They can then be easily removed; there will then not be the bother and worry of having a broken cork, and thus much valuable time is saved, especially in prescription work.

Making Fluid Extracts.

While on the subject of fluid ex-

tracts we would again like to present a process for manufacturing these preparations that is at once inexpensive, cleanly, quick and reliable.

It is a well known fact that the first 750 Cc. of percolate from 1000 Gm. of drug is practically finished fluidextract. All the trouble, time expended and worry comes after this greater portion of the fluidextract has been made, namely, evaporating the weak percolate to the consistence of a soft extract.

By the time this is accomplished, the resulting extract is rendered to a large extent inert and insoluble. You have wasted your time and your alcohol, your temper has been ruffled and you have little to show for it.

Now, instead of wasting so much alcohol, why not waste a little of the drug and have a reliable preparation, much more so than when made by the evaporation process, and besides much cheaper and also at a less cost than you pay for the manufacturers' product.

The process is simply this: When you have an amount of first percolate equal to 75 per cent of the amount of the drug used, stop. If you have used 1000 Gm. of drug, you have 750 Cc. of finished fluidextract, providing you have operated carefully in each and every detail of the process of percolation.

Just Be a Pharmacist.

This process is worth serious consideration and if adopted will solve many difficulties for you.

For instance, you wish to prepare 4 fluidounces of the Fluidextract of Lappa (Burdock). Instead of taking 4 ounces of Burdock root, you take 1-3 more, or 5 1-3 ounces. This you moisten with 17 fluidrams of diluted alcohol and when the percolate measures 4 fluidounces, the process is finished.

You must assure yourself of the fact that your Burdock root is of proper quality, that it is of the proper fineness (No. 60), that it is properly moistened and macerated a sufficient length of time, that it is packed evenly and firmly in a cylindrical percolator,

and that percolating shall proceed very slowly.

These four fluidounces will cost you not more than 20c and you may be sure that it is a fluid extract.

CHAPTER XXXV.

Many druggists may suppose that the subject of the preservation of drugs and preparations is a side issue and that no care is required, but the three previous chapters should have proven conclusively that **care is needed**.

The preservation of our medicines is our most important duty after their manufacture, and next comes our duty to the physician in telling him about these preparations.

When all your official preparations can be depended upon by the doctor to do just what he expects them to do, you will virtually have killed the present nostrum business.

The Preservation of Volatile Oils.

Every volatile oil should be stored in a dark and cool place. This means the cold storage room, an amber colored bottle and a good cork. Volatile oils, almost without exception, lose much of their peculiar, characteristic and fragrant odor, if they are not properly stored.

The loss of fragrance is not always readily detected, as the change from good to bad is a comparatively slow one and besides, not enough attention is given to this valuable property and distinguishing test.

The change is rapid in such oils as Lavender, Lemon, the various Orange oils, Rosemary, Fennel, Caraway, Cinamon, Sassafras, and several others.

To prove conclusively that you have purchased very poor volatile oils or that you have allowed a good oil to deteriorate, try the following experiment with the Oils of Orange and Lemon.

Rub one drop in the palm of your hand and note the odor. Now immediately afterward note the odor from pressing the rind of a real and fresh orange or lemon, that you know **does** contain the genuine oil.

Do you notice the difference? Does this information teach you anything?

Not all volatile oil will be found of poor quality, to be sure, but the chances are all in favor of their being so, considering the lack of preservative facilities.

Crush some caraway, fennel or lavender, and place them in an open vessel containing boiling water, and note the peculiar, agreeable and characteristic fragrance in each case.

Compare this with the oil in your bottle and you are at once struck with the difference.

Now how can you expect to make a real elixir that has palatability from an oil that has turned into turpentine-like bodies to a great extent?

You cannot, nor can anyone else, and the result is that your elixirs do not have that agreeable taste and flavor which the doctor is seeking and upon which he is depending to make his prescriptions acceptable to his patients' sense of taste and smell.

Do you wonder any longer that the physician prescribes a ready-made nostrum whose only **real** claim for recognition might lie in the beautiful looks and pleasant taste and odor!

It is all well enough to say we are living in the twentieth century and are doing business according to present day methods; that pharmacy has advanced to such a stage that we can make more elegant preparations from oils than from the fruit or rind, as formerly; and that we can make these preparations easier and more uniform.

Odor Must be Preserved.

Of what use is all this improvement and advancement if we don't know how to store and conserve these delicate principles that represent the drug, that they may retain each and every one of their activities? What good are they to us?

Better, by far, would it be to make Elixir Aromaticum, U. S. P., from orange and lemon rinds, coriander and anise fruits, than to use the corresponding volatile oils that have lost most of their fragrance and all of their taste; we would then at least have **An Aro-**

matic Elixir that would be **AROMATIC**

There is as much difference in the odor and palatability of an elixir made from absolutely true volatile oils and one made from the ordinary oils as there is between a good and a bad egg.

Light is the worst enemy of a good volatile oil, and for this reason all of these oils should be kept in amber bottles or in a dark place. Buy only in small quantities just enough to anticipate your wants for three or four months and those that are only rarely used should (in the absence of a refrigerator) be kept in the basement or other cool place, but not on your shelving.

Extracts.

Solid extracts should be preserved in securely covered glass jars, and these jars should preferably be placed in a tightly fitting tin can of sufficient capacity to permit the easy removal of the original jar.

These extracts, according to the Pharmacopoeia, should be of a pilular consistence, which they not always are when purchased ready made, and the above way of storing will materially aid in keeping them of the proper consistency and making their manipulation easy.

Powdered extracts, in order to keep their powdered form, need the best of care, as every pharmacist knows to his sorrow.

These extracts are often purchased with the cork securely driven into the neck of the containing bottle, and in the hurry to remove it the cork is often greatly damaged. At least, it is rendered imperfect and unfit for use.

The bottle is replaced in its position with the imperfect cork closing the opening and in a few weeks the extract has repeatedly absorbed enough moisture to render it sticky and finally it dries out, leaving a hard and horny mass, almost unfit for use and impossible to remove from the bottle.

Now this can all be prevented by simply replacing (as soon as you receive a new supply of extract) the original cork with a new one that pro-

jects out far enough to be readily grasped with the fingers. The cork should always be inserted with a twisting motion and a downward pressure, and upon removal the twisting motion should be continued in the same direction with an upward pressure. In this manner, and by replacing corks as soon as possible when in use, you will experience very little difficulty with powdered extracts.

CHAPTER XXXVI.

The sixth propaganda letter advocates the exploitation and sampling through an accompanying booklet the following three preparations.

Syrup of Hydriodic Acid, U. S. P.; Pulvis Antisepticus, N. F., and the Glycerinated Elixir of Gentian.

1—**Syrupus Acidi Hydriodici, U. S. P.**

Diluted Hydriodic Acid..	100 Gm.	\$0.11
Water	300 Gm.	.00
Syrup	600 Gm.	.06

1000 Gm. cost \$0.17

Just mix these three ingredients, 1,000 Gm. measure about 28 fl. oz., hence the cost is about 10c per pint, therefore don't buy it. This syrup should be freshly prepared as wanted, thus always assuring an almost colorless preparation and one containing the maximum amount of therapeutic activity. Every pharmacist should make his own Diluted Hydriodic Acid, the official formula of which is found on page 11 in the Pharmacopoeia.

Making Hydriodic Acid.

Three fluid ounces (100 Gm.) of it are made as follows: Dissolve 208 grains of Potassium Iodide and 16 grains Potassium Hypophosphite in seven drams of distilled water, with the aid of a little heat. Dissolve 211 grains pure Tartaric Acid in eleven drams of Diluted Alcohol, in a bottle of about 4 fluid ounces capacity.

To this Tartaric Acid solution add the solution of the Potassium Salts and shake the mixture briskly. Then place the bottle in a bath of ice water or pack it in ice for several hours, af-

ter which you filter it through cotton. This cotton should be tightly inserted in the throat of a glass funnel.

When all the liquid has passed through the cotton, wash the bottle and the crystalline precipitate with several successive portions of Diluted Alcohol (preferably very cold) until one hundred grammes (about 28 fluidrams) of clear solution have been obtained.

Evaporate this liquid to about two fluidounces (to remove all of the alcohol) at a low temperature and on a water bath. When cold add enough Distilled Water to make three fluidounces (100 Gm.)

This diluted acid should be preserved in an amber colored bottle and the label might state, for convenience, the above official formula for the Syrup.

Thus, when a prescription calls for 4 fl. oz. of the Syrup you would use:

Diluted Hydriodic Acid.....	200 minims
Water	11½ fluidrams
Syrup	17 fluidrams

2—Pulvis Antisepticus, N. F.		
Salicylic Acid	5 Gm.	.01
Carbolic Acid	1 Gm.	.01
Eucalyptol	1 Gm.	.01
Menthol	1 Gm.	.01
Thymol	1 Gm.	.01
Zinc Sulphate	125 Gm.	.01
Boric Acid	866 Gm.	.45

1000 Gm. cost \$0.51

Cost per pound about 25c.

Triturate the Salicylic Acid and the Sulphate of Zinc to a very fine powder. This is of great importance, in fact the usefulness of the powder, in a large degree, depends upon the fineness of this mixture.

Then add the Thymol and Menthol, which have previously been rubbed to a fine powder with a small portion of the Zinc mixture; then add the Eucalyptol and Carbolic Acid, continuing the trituration and gradually adding the Boric Acid in small portions at a time until a uniform, impalpable powder is produced. Do not use the ordinary powdered Boric Acid but the "impalpable" kind. The cost is greater, but the uses of the Antiseptic Powder demand it.

3—Elixir Gentianae Glycerinatum, N. F.		
Fluidextract Gentian	10 Cc.	.02

Fluidextract Taraxacum.	15 Cc.	.08
Acetic Ether	5 Cc.	.01
Phosphoric Acid (5 Cc.)	8.5 Gm.	.01
Tr. Sweet Orange Peel..	15 Cc.	.02
Tr. Cardamon Compound	60 Cc.	.05
Solution Saccharin	30 Cc.	.03
Glycerin	400 Cc.	.22
Sugar	200 Gm.	.03
White Wine, to make...	1000 Cc.	.15

1000 Cc. cost \$0.57

Cost per pint, about 27c.

Dissolve the sugar in about 325 Cc. of Sherry Wine, add the Glycerin, and then in the following order the other ingredients; Solution Saccharin, Acetic Ether, Phosphoric Acid, Compound Tincture of Cardamon, the Fluidextracts and lastly, the Tincture of Orange Peel, agitating thoroughly after each addition. Then add enough Sherry Wine to make 1000 Cc.

This produces a preparation with a minimum amount of precipitation.

Allow to stand for one day, and if possible, one week, before filtering.

A much more agreeable and more palatable preparation is produced if the Sherry Wine, Acetic Ether and Phosphoric Acid are mixed and allowed to stand about three months before adding the other ingredients.

This Elixir can also be made by percolation, using 10 Gm. of Gentian and 15 Gm. of Taraxacum.

Make a menstruum as follows: Tincture Orange Peel, 15 Cc., Compound Tincture Cardamon, 60 Cc., and White Wine 200 Cc. Moisten the drugs with 8 Cc. of this menstruum and finish the percolation with White Wine to make 400 Cc., or enough so that when all the other ingredients are added the product will measure 1,000 Cc.

CHAPTER XXXVII.

To continue the subject of the preservation of drugs and preparations from Chapter XXXV, there are many chemicals that require better care than is generally given them.

For instance, many times Calcium Hypophosphite is sent in paper cartons, and in spite of the caution on the box that the manufacturers will not guarantee quality if kept in these boxes, few ever remove the contents to a well-corked amber colored bottle.

The result is that the Hypophosphite oxidizes to a certain extent in the paper box, trouble ensues in making syrups, liquors and elixirs, and then the formula is blamed for not making a stable preparation.

Pharmacists should realize that it is of exactly as much importance to preserve a drug, chemical or preparation properly, as it is to make it right at the beginning.

Do you let your sugar barrel stand uncovered, that dust, dirt, flies and moisture can play havoc with it? Of course not; sugar costs money and besides, when you want to make syrup, you do not like to dig into caked sugar, or pick out flies, or strain or filter out the impurities.

You will use every possible precaution to preserve an \$18 barrel of sugar, so why not in the case of your chemicals and other articles that generally are bent on missions of life and health?

Preservation of Chemicals.

Many chemicals, when exposed to the air, absorb moisture and become damp, and some even liquify. "Exposed to the air" does not mean pouring the contents out of the bottle and onto a table or newspaper; in our case it means imperfect corks or a bottle not securely corked.

Chemicals peculiarly susceptible to this influence are the Chloride, Bromide and Iodide of Ammonium; Chloral; most exsiccated salts as dried Alum, dried Sulphate of Iron, and the dried Carbonates of Sodium and Potassium; all effervescent salts; the scale Salts of Iron; Chlorinated Lime; Pepsin; Bromide and Chloride of Sodium; Potassium Acetate; Zinc Chloride; Potassium Sulphuret; Sulphate of Spartein, and others.

Many of these chemicals not only lose their physical characteristics and are thus difficult to dispense, but they are decomposed.

Light and air, either separately or together, are enemies to such delicate chemicals as Benzoic Acid, Apomorphine and its salts, Aconitine, Quinine and its salts, Arsenic Iodide, Aristol,

Camphor, Chysarobin, almost all Iodides and Iodoform.

Ferrous Salts an Exception.

Ferrous salts on the contrary, are best kept in the light, but protected from the air; this includes such as the Sulphate and Carbonate of Iron, in various forms.

Much of the difficulty experienced in preparing the various elixirs that contain the scale (ferric) salts of iron, is owing to the change that these salts have undergone in the presence of air and light, and as a consequence no reliable or correct pharmaceutical preparation can be made from them.

It is for this reason that the author has so often and so insistently cautioned and warned and expostulated with pharmacists, to work towards the laboratory end of their business, the real life work of their profession.

The Source of Your Troubles.

It is so easy when all is said and done, that it's very simplicity has been the means of defeating you in your work; you have become careless and negligent of one of your most important duties, preservation, and the result is that you experience countless difficulties in manufacturing the simplest preparations.

The list of chemicals that suffer from the action of light and air is a long one and includes besides those already mentioned Lead Acetate, many salts of Mercury, Resorcinol, Santonin, all Silver salts, and all Valerianates.

In the case of those that volatilize only, as Camphor, no further harm is done than actual loss of drug; those that change in color and appearance, as Benzoic Acid, Santonin, Sodium Salicylate, Pepsin and numerous others are the ones that make the trouble in your preparations, etc.; however, in the case of such as are decomposed, as Ammonium Carbonate, Arsenic Iodide, Thymol Iodide, Mercurous Iodide and others, it is nothing short of criminal to use, dispense or sell them.

On the Safe Side.

You cannot use too much care in preserving your stock and unless you know positively that light and air, especially light, does not affect a certain

substance, keep it in an **amber-colored tightly-stoppered bottle**, thus making assurance doubly sure.

If you will recall to mind all the various preparations with which you have experienced trouble of some kind or other, you will discover the fact that in the majority of instances it was not the fault of your manipulation or of the formula, but of one or more of the drugs used in their manufacture.

You must be very careful of the source of your supplies, realizing that quality is everything and price only a secondary consideration.

A jobbing house or a manufacturing house that has no high ideals in regard to quality, is not a safe house for you to deal with.

If you order drugs for any U. S. P. or N. F. preparations, specify "U. S. P." or "absolutely pure," and do not accept **anything** else, not even if marked "technical"

CHAPTER XXXVIII.

The storing or preservation of inflammable liquids is important. In fact, it is of great importance, as careless storage has times without number caused serious fire loss.

Benzine, gasoline and kerosene are among the worst offenders in this respect, on account of their being on hand in large quantities, the call for them is frequent and their common use renders us careless.

These and, in fact, all inflammable liquids, should be preserved in tin cans whenever possible, on account of the pressure from within in a warm atmosphere and also to guard against accidental breakage.

When any of these products are kept in tin cans requiring corks for stoppers, these corks should be perfect and put in tightly.

Ether is Dangerous.

Never take any chances with inflammables of any kind, but make yourself doubly secure with each one. You may never have had an accident and may never have heard of one, but the chance of one is always present with you.

To show what **careless storage** might do in the case of an inflammable liquid, take a small fairly air-tight box or can, dimensions about one foot each way, and make a few openings in it, enough to keep a lighted candle burning when placed in it. Then place a small open can containing ether in the box with the lighted candle, close well and await developments.

As soon as the air in the box has become fairly well mixed with the vapors of the ether, a violent explosion will occur, which will rend and tear the box, however well made, into hundreds of fragments.

A pound of Ether, if spilled on the floor, will, as soon as it has evaporated and become diffused in the air of an ordinary store-room, be enough to wreck both the store room and the building, if any lights happen to be burning at the time to explode this highly combustible mixture.

Ethyl Chloride and Ethyl Nitrite require special care and should be kept only in small containers, the best being hermetically sealed glass tubes.

Phosphorus should be stored under water, in strong and well closed vessels, protected from the light.

Collodion, Alcohol, Acetone, all Spirits and inflammable liquids generally should be stored in cool places, and away from lights or fire.

Special Caution.

Owing to its great importance in medicine and the need of special care in storing it, we would once more call attention to the preservation of Sweet Spirits of Niter (*Spiritus Aetheris Nitrosi*, U. S. P.).

In making this Spirit, the best plan to pursue is to purchase a quantity of the very best quality of Ethyl Nitrite, enough for a reasonable length of time, say four to five months, and at once make it up into the official preparation, unless it is made according to the U. S. P. process.

Then transfer it to 4 oz. amber colored bottles, securely corked, and keep these in a **cool place**, and nowhere else.

A Typical Case, Showing Value of Preservation Knowledge.

This preparation is a very forceful argument of the value of intelligent preservation. If it is kept, as is many times the case, in the ordinary quart shelf bottle, exposed to light and heat, the preparation soon becomes useless as far as therapeutic activity is concerned.

Any physician will make the statement that the Spirit of Nitrous Ether is one of the most dependable remedies in the febrile affections of children, and such is really the case if it is of U. S. P. quality.

Now when a physician at various times gets a preparation whose therapeutic activity is a thing of the past, can you blame him if he listens to the pleadings of the detail man or nostrum maker, to try his "cure-all" for fevers, etc.?

But there is a more serious side to the question. A child, at best, is but a feeble human being. Now, when this child is sick with fever, its vitality is down to a minimum and it does not take much to snuff out the little spark of vitality left.

A Life in the Balance.

The physician prescribes the Spirit of Nitrous Ether, well knowing that it will bring the child back to life and health, and if your Spirit is not absolutely pure, the result may be that the little spark of life is extinguished.

You would not have it said of you that because your medicine was not pure, a child died—would you? Do you realize the great moral responsibility that rests upon you, for having the title "Registered Pharmacist" granted to you by the state?

You must realize now, if you never did before, that the lack of therapeutic activity in your official and unofficial preparations must drive your physicians to prescribing other remedies; must drive people to believe in other cures, besides drug cures.

And lack of therapeutic activity only comes from one of three things: Either you buy inferior drugs; you do

not prepare them carefully when they are good; or you do not preserve them properly when they were made right.

As a registered pharmacist you have neither a moral nor a legal right to neglect any one of these three cardinal pharmaceutical principles.

CHAPTER XXXIX.

The manufacture of effervescent powders and of granular effervescent powders is becoming more general among retail druggists of late.

The only reason we can give for this belated arrival among the pharmacists' preparations is the fact that heretofore this work has been considered too difficult or too tedious to be undertaken in the pharmacist's laboratory.

The Original Effervescing Powder.

In order to illustrate the fallacy of this argument, just consider the subject of the preparation of Seidlitz Powder, the original effervescing powder of the U. S. P. (*Pulvis Effervescens Compositus*).

Not much difficulty in making this, nor is the process tedious, is it?

The National Formulary contains processes for eight effervescent powders, namely; Citrate of Iron and Quinine, Phosphate of Iron, Potassium Bromide, Potassium Bromide with Caffein, Artificial Carlsbad Salt, Artificial Kissingen Salt, Artificial Vichy Salt and Artificial Vichy Salt with Lithium.

These are prepared with less work than is the Seidlitz Powder, being dispensed in bulk and you should advise your physician patrons of your ability to prepare these powders fresh on prescription.

By closely studying the above eight powders, you will see that the principal thing in making them is to have a sufficient quantity of the Saccharated Sodium Bicarbonate and Saccharated Tartaric Acid on hand.

The two mixtures are readily prepared, the first being a simple mixture of 3 parts of Sodium Bicarbonate and 1 part of Sugar, and the second a mixture of 675 parts of Tartaric Acid and 325 parts of Sugar.

Two cautions should be observed as regards these mixtures, namely, the powders should be very fine and they should be preserved in well-stoppered, wide-mouthed bottles to keep them so.

The object of the two saccharated mixtures, one alkaline, the other acid, is to produce the sweetness and the pleasant effervescence and to form a neutral salt (Tartrate of Sodium) that is unobjectionable as regards palatability and therapeutics.

It is not even necessary to have these mixtures already prepared, as their extemporaneous preparation is quickly accomplished.

The Modus Operandi.

For instance, a prescription is handed to you as follows:

R.—Pulvis Potassii Bromidi Efferves-
cens cum Caffeina, N. F. ℥iv

Sig.—A heaping teaspoonful, in
water every three hours.

Turning to the formula on page 137 in the N. F., you find that 11% is Potassium Bromide, or 211 grains. You weigh this off and finely powder it. Then you want 11/10% of Caffein, or 21 grains, and you mix this with the Bromide and transfer the mixture to a sheet of paper.

Then 44% is Saccharated Sodium Bicarbonate, or 844 grains. One-fourth of this is Sugar, hence you thoroughly mix 211 grains of finely powdered Sugar (pure) with 633 grains of pure Bicarbonate of Soda, and add this mixture to the Bromide mixture.

The other 44% is Saccharated Tartaric Acid, also 844 grains. 32½% of this is Sugar, hence you take 274 grains of Sugar in fine powder and thoroughly mix it with 570 grains of finely powdered Tartaric Acid.

Now mix all together thoroughly, pass through a sieve once or twice, transfer to a proper sized wide-mouthed bottle, cork securely and you have an excellent and efficient effervescent powder:

The cost of this is approximately 35c per lb., or about 10c for the above 4 oz. Compare this price with the cost of the ready-made article (30c to 35c per four-ounce bottle).

An ordinary teaspoonful of this powder weighs about 90 grains, and the above amount contains 21 such doses, each representing about 10 grains of Potassium Bromide and 1 grain of Caffein.

A Valuable Field for the Pharmacist.

Should the physician wish to prescribe a drug in effervescent form for which no formula is given, find out what dose is wanted and then the rest is easy. Always use as much Saccharated Sodium Bicarbonate as Saccharated Tartaric Acid, otherwise your effervescing drink will not be pleasant.

Supposing the physician wishes to give his patient 4 grains Hexamethylenamine and 10 grains of Potassium Citrate to each dose, and he prescribes a four-ounce quantity of the powder.

You calculate this as follows: Four ounces make approximately 21 doses, therefore you weigh off 84 grains of Hexamethylenamine and 210 grains of Potassium Citrate. The total four ounces equal 1920 grains and of this 294 grains are medicinal ingredients.

The balance, 1626 grains, represents equal parts of the saccharated mixtures, therefore you take 813 grains each of the Saccharated Bicarbonate of Sodium and the Saccharated Tartaric Acid.

Prescriptions like these offer no difficulty in their preparation, being simple mixtures of the simplest kind and if you will advise your physician of the fact that you can make them quickly and economically no doubt he will co-operate with you by prescribing them.

Your preparation will have the added advantages over the ready-made in being fresh and full of effervescence, and the physician can regulate the dose and also the remedy to suit himself.

CHAPTER XL.

The granular effervescent salts official in the U. S. P. are those of Citrated Caffein, Lithium Citrate, Magnesium Sulphate, Potassium Citrate and Sodium Phosphate.

In the National Formulary a process is given for an effervescent granular Magnesium Citrate, and also processes for granulating the effervescent powders mentioned in the last chapter.

In granulating these powders, part of the Tartaric Acid is replaced by Citric Acid, as this renders the process easier.

It is to be specially noted that in the National Formulary exactly half of the saccharated Tartaric Acid is replaced by an equal weight of Saccharated Citric Acid.

In the preparation of the latter the Acid is not to be dried, but simply finely powdered and mixed in the proportion of $62\frac{1}{2}$ per cent of Citric Acid and $37\frac{1}{2}$ per cent of finely powdered Sugar.

In the pharmacopoeial process, no saccharated acids are used, but the pure acids in molecular proportions to make a neutral mixture when dissolved in water.

Granulating the Mixture.

There are three methods available for granulating the mixed powders, either of which will produce nice, clean granules, if details are carefully looked after.

The first process consists in transferring the powder to an evaporating dish and placing this dish in an oven, which is heated to a temperature of about 100° C. (212° F.), being that of boiling water, and carefully kneading with a wooden spoon or spatula.

The mixture soon acquires a moist consistence, soft and sticky, owing to a slight reaction between the acid and alkali, caused by a slight liberation of water.

This is favorable to the production of large and even granules.

While in this moist condition the mixture is transferred to a coarse tinned iron sieve (No. 6), and rubbed through with the aid of the wooden spoon.

The operation can also be performed with glass, porcelain or tinned iron apparatus, but direct contact with metals must be avoided, as contamination and discoloration of the product will result therefrom.

The granules, as they drop from the sieve, should be collected on a piece of clean paper or glass and dried at a low temperature.

A temperature of from 120° to 130° F. is about right, although the lower temperature is to be preferred. The drying can be done in an oven or out in the open air on a dry hot day.

If dried in the open air, the direct rays of the sun should be guarded against, also dust. When thoroughly dry, transfer to well-stoppered, wide-mouthed bottles.

Another Process.

The second process consists in placing the dish containing the effervescent powder upon a water-bath which is kept at a temperature of about 150° F. (65° C.).

The mixture is constantly stirred, first becoming moist, and, as the heat and stirring is continued, gradually becoming dry and granular, although many of the granules may be exceedingly small from the constant stirring.

Never use a direct flame in making these granular preparations, as the product will surely be burned, become discolored and unfit for use.

The water bath can be replaced by a paraffin bath with good results, as the ever present danger of steam is avoided.

When steam escapes from the water-bath and becomes mixed with the effervescent powder, the result is an inferior product, or may even be worthless, because the aqueous vapor causes considerable loss of carbonic acid gas.

The Alcohol Process.

The third process consists in moistening the effervescent powder with alcohol, and is very convenient, especially for small quantities. The results are fine if the operation is carefully performed. This method consists in simply placing the mixed powders in a suitable dish or vessel, and gradually stirring in alcohol, a little at a time, until the mass becomes lumpy.

This small amount of alcohol and the constant stirring forms the granules, it being simply a practical illustration of the property of cohesiveness.

Do not use enough Alcohol to make a paste, as no granules can then be made from it.

As soon as the granules are formed, stop stirring and dry them. That completes the process, yielding, however, small granules.

Should larger granules be desired, add just a little more Alcohol than the lumps may become somewhat larger than before and then pass the mixture through the sieve, as noted above.

Preservation.

The making of granular effervescent salts should not be undertaken in a damp atmosphere or in warm, muggy weather, as they are peculiarly susceptible to change, and for this very reason they must always be preserved in wide-mouthed bottles, with close and perfectly-fitting corks.

The most important part of the process of granulation is that after the mass is moist and ready for the sieve, your actions must be quick—not a moment must be lost in the transfer or in the sifting process.

Sugar has a great tendency to discolor the granules unless great care is used in keeping the temperature right.

The alcohol process has the advantage of making the granules more palatable, but a reason for this is rather difficult to locate, unless it be the entire absence of heat in the manufacturing process.

CHAPTER XLI.

The making of a galenical preparation that is at once presentable, palatable and therapeutically active, should be a pharmacist's one great desire, his one great object.

Very often the pharmacist is ordered to make a preparation containing fluid extracts of variable alcoholic strengths, syrup and elixir, or other diluents.

Even the National Formulary has several formulas of this character and, at times, it takes the most painstaking calculating and scientific manipulations to prepare a presentable preparation, with a minimum loss of therapeutic activity.

It will be decidedly to every phar-

macist's interest and to the advantage of pharmaceutical progress in general, if a somewhat different plan from the customary one is instituted, resulting as it generally will, in a much better preparation.

It will at least have the added advantage of being therapeutically reliable. This property, in the main, is what the physician is after, for even "a nasty medicine is better than a nice funeral," to quote a quaint saying.

An Illustration.

To illustrate, we will take the Compound Elixir of Celery of the National Formulary, although any similar formula, either official or unofficial, would answer equally as well. The formula for this Elixir consists of 2 fluid ounces of the Fluidextract of Celery Seed, whose alcoholic content is 66 per cent; 2 fluidounces of Fluidextract of Coca, with an alcoholic content of 50 per cent; 2 fluidounces of Fluidextract of Viburnum Prunifolium, with an alcoholic content of 60 per cent; 4 fluidounces of pure alcohol and 20 fluidounces of Aromatic Elixir, whose alcohol content is 25 per cent.

The addition of the 4 fluidounces of alcohol is a valuable one from a pharmaceutical standpoint, but similar additions are not found in a great many of the formulas under discussion.

Objections to the Formula.

When concentrated preparations like fluid extracts, containing different percentages of alcohol, are mixed, precipitation almost invariably results and generally some of the active medicinal properties are lost by being afterward filtered out.

True, in the above Elixir, this is in a great measure prevented by the primary addition of Alcohol to the Aromatic Elixir and the subsequent addition of the Fluidextracts, but even with the most careful manipulation, precipitation is bound to ensue.

The finished Elixir contains approximately 13 fluidounces of Alcohol, or about 40 per cent, and as none of the individual ingredients contains 40 per cent, it can readily be seen that precipitation is bound to occur.

And when precipitation does ensue, you are losing some of the valuable properties of the fluidextract for which you pay a rather high price, provided you had a genuine, full-strength fluidextract to begin with. Again you have very little use, as a rule, for these four fluidextracts, possibly none other than in preparing this Elixir.

The Remedy.

All of these objections, whether real or fancied, whether pharmaceutical, medicinal or economic objections, can readily be overcome by simply preparing the Elixir as it should be prepared, from the drugs and by the simple process of percolation.

And this is the process for doing it, applicable to any and all similar formulas, simply using some of the arithmetic you learnt while at school and in a practical way:

As 1000 Gm. of drug make 1000 Cc. of Fluidextract, therefore $35\frac{1}{4}$ oz. av. of drug make 33.4-5 fl. oz. of Fluidextract, in other words, 4 per cent of the amount of the drug in fluidextract form, added to this amount, equals the amount of drug to use.

The New Process.

Hence in the above Elixir, we replace each Fluidextract by 2 1-12 oz. av. of drug ($2 + 4\%$ of 2), and grind the mixed drugs to a No. 40 powder.

As the finished Elixir contains 13 fluidounces of Alcohol, we make a menstruum containing a similar amount and 15 oz. Water, making a total of 28 fluidounces of menstruum, the balance of the 32 fluidounces of finished Elixir being taken up by $6\frac{1}{2}$ oz. of Sugar, the amount present in 20 fluidounces of Aromatic Elixir.

Now moisten the 8 1-3 oz. av. of mixed drugs, with about $3\frac{1}{2}$ fluidounces of menstruum and allow it to macerate two hours. In the absence of any definite data in moistening drugs for percolation, use about 1-3 as much menstruum as drug, and then if not distinctly damp, add enough more to make it so.

Some heavy powders, as Kola, require only $\frac{1}{4}$ of their weight in menstruum, while lighter ones, as Celery

Seed require almost $\frac{1}{2}$ of their weight in menstruum, to render them distinctly damp.

After this first two hours maceration, pack the drugs moderately firm in a cylindrical percolator, add enough menstruum to saturate the powder and leave a stratum above it, and macerate a further twenty-four hours.

In powdering and packing drugs for percolation there are valuable rules, not generally known nor practiced when known, that are of the greatest importance and these will be brought out in a subsequent chapter.

After the above second maceration, allow the percolation to proceed until 28 fl. oz. of percolate are obtained, adding enough additional menstruum to procure the required amount of percolate.

In this dissolve the $6\frac{1}{2}$ oz. of Sugar and two fluidrams of the Compound Spirit of Orange, by agitation.

The two fluidrams of Spirit represent the amount present in 20 fluidounces of Aromatic Elixir, and could be replaced by its volatile oil constituents, viz.: Oil Orange 24 minims (48 drops), Oil Lemon 6 minims (12 drops), Oil Coriander $2\frac{1}{2}$ minims (5 drops) and Oil Anise 3-5 minims (1 drop.)

This gives you an Elixir with a maximum amount of therapeutic activity, palatable and presentable.

It's cost is 26c per pint, compared with 47c per pint if purchased Fluidextracts are used, and from 55c to 65c if purchased ready made.

CHAPTER XLII.

Much of the success of the pharmacist as a laboratory worker lies in the art of looking into the details of a process, and nowhere is this more apparent than in the process of percolation.

Six Cardinal Principles.

To make a preparation by percolation that is clear, that represents a definite strength pharmaceutically and is active therapeutically, six important details must always be strictly attended to, viz.: Buying good crude drugs, powdering the drug properly, moistening it sufficiently, packing it right,

macerating a sufficient length of time and allowing the process to proceed slowly.

Buying Good Drugs.

It is of prime importance, naturally, that your crude drugs have a maximum amount of medicinal value, otherwise your preparation is worthless, no matter how careful you are with subsequent details.

Almost every crude drug purchased by the retailer can be examined by him as to its genuineness with the aid of the Pharmacopoeia, the Dispensatory, or a work on *Materia Medica*.

Take, for example, such important and commonly used drugs as Ergot, Opium, Cinchona, Rhubarb, Senna, Aconite, Belladonna, Buchu, Colchicum, Digitalis, Cascara and numerous others, and from the pharmacopoeial description, you can readily determine whether you have purchased a genuine drug.

If it does not come up to the requirements, there is **only one** course open to you, and that is to return it to the sender. No other course dare be pursued. If you use an inferior drug in a preparation, the preparation itself will be inferior and the physician will not get the results he is looking for.

The failure to do this is in a large measure responsible for the fact that a physician must seek other means than the official preparations of the U. S. P. and N. F. to combat disease.

And if such "other means" are proprietaries or the various attempts to cure disease without medicine, you must not blame the physician, for **the fault is your own**.

It is up to you, and **no one else**, to prepare medicines that are therapeutically active; and moreover, that is a duty you owe yourself, the physician and the state.

When once you realize this fact, it will be but the simplest kind of work on your part to become what you should be, an expert pharmacist, and that is what your medical friends expect you to be.

Powdering the Drug.

Having procured the drug of a superior quality, the next step is to powder

it, either in an iron mortar or in a drug mill.

Different drugs require a different degree of fineness. As a rule, the easier they are of extraction, the coarser the powder, and vice versa.

The formulas for Tinctures, Fluid-extracts, etc., in the U. S. P. and N. F., if carefully studied in this respect, will afford an excellent study of how drugs are divided into classes as regards powdering them for percolation.

Thus Ipecac, whose active principle, Emetine, is embedded in a very tough bark, (a cortex), must be reduced to a very fine powder, No. 80, that the slow percolation with a strongly alcoholic menstruum may thoroughly exhaust it.

Aconite belongs to the same class, although a No. 60 powder is sufficiently fine, the menstruum being also strongly alcoholic.

Lobelia and *Serpentaria* belong to the No. 50 powder class, then we have Bitter Orange Peel and *Cascara Sagrada* where a No. 40 powder is sufficient, such drugs as Gentian and Rhubarb are readily extracted in a No. 30 powder, and for such as *Calumba* and *Glycyrrhiza*, a No. 20 powder is sufficient.

While every variety or class of drugs, as root, leaves, seeds, barks, etc., may be required in a different degree of fineness, the one main point to be taken into consideration is the "toughness" of that part of the drug that contains the active medicinal principles.

For this reason no hard and fast rules can be laid down in powdering the drug, the only guide being the physical structure of it.

Of course, in a secondary degree, the amount and alcoholic content of a menstruum and the length of time in percolation are also factors in exhausting a drug, as any pharmacist will understand.

The Pharmacopoeia and the National Formulary give us the true information for official drugs, and for such as are not official, a little study of the physical structure will soon tell you the degree of fineness required.

Illustrations.

For instance, you are about to make a preparation containing *Helonias*

(False Unicorn root) as one of the ingredients and you have no data at hand with which to be governed.

As the active principle is Chamaelirin, according to the Dispensatory, and is freely soluble, a No. 40 powder would be right, when used in connecting with a menstruum of Diluted Alcohol and rather slow percolation.

An intelligent application of common sense is the one important factor in arriving at conclusions in such cases, and this will also overcome almost any difficulty that you may encounter.

An illustration, comparing the price of a ready made tincture with your own make, is offered in the Tincture of Coto, N. F.

This tincture, made either by maceration or percolation, will cost you 47c per pint to make. The ready-made product is listed at all the way from 60c to \$1.80 per pint.

Coto bark is coming into popular use as a remedy in certain forms of diarrhoea, and is a valuable addition to this class of remedies.

CHAPTER XLIII.

Continuing with the interesting subject of percolation from the previous chapter, we will strive to make plain some other "small details" of this most interesting process.

In the last article we have managed to procure a superior quality of drug, and have succeeded in getting it into the powdered form.

Sifting and Moistening.

In powdering and sifting a drug for percolation, care must be exercised to prevent the loss of dust, as in the great majority of instances the dust or finer particles contain a proportionately larger amount of active principles than the coarser parts of the powdered drug.

By having a modern drug mill this loss is reduced to a minimum, and it can also be set so that the first grinding will powder the greater part of the drug to the required degree of fineness, be it a No. 80 powder, 60, 50, 40, 30, 20 or 12.

In moistening the powder for the first maceration the object is to soften

the drug and in a measure to bring it back to its original moist state (the growing state), as the action of the solvent menstruum is then more definite and uniform.

If the drug is soft or woody physically, it is readily penetrated by the menstruum, and from one-half to two hours will suffice for the first maceration.

Such drugs are Senna, Glycyrrhiza, Cascara, Rhubarb, etc. If the drug is hard or horny, as Ipecac, Nux Vomica, Aconite, or in fact any drug containing powerful alkaloids, the first maceration should consume twelve hours, or for the sake of convenience, over night. Keep the vessel containing the moist powder tightly covered, to prevent loss by evaporation.

Packing.

The next important step is packing. If the original powder was a No. 30 or finer powder, pass the moistened drug through a very coarse sieve, to break up any possible lumps, sift it onto a large piece of paper and transfer all at once into the percolator.

The percolator should be of such a size that the powder in it will occupy not more than two-thirds of its height.

The small tuft of cotton or sponge which is pressed into the neck of the percolator is best moistened with a few drops of the menstruum, to facilitate the passage of the first part of the rather dense percolate.

The shape of the percolator, for most drugs, should be nearly cylindrical, that is, slightly conical or tapering, especially when the drug is not liable to swell or the menstruum is strongly alcoholic.

For such drugs as do swell, like Arnica, and where the menstruum is only feebly alcoholic, a more conical-shaped percolator can be used, to better take care of the swelling in the drug. However, if the first maceration has been properly attended to, the maximum point of swelling will have been reached, thus guarding against the objectionable swelling in the percolator, which very often stops the process of percolation altogether.

In first moistening the drug, it should be distinctly damp; in fact, so much so that when a handful is taken up and compressed in your fist, it should cohere as a lump, that again can be readily crumbled up. Should the drug have absorbed the menstruum and appear light, dry, and refuse to form the lump, when the first maceration is complete and you are ready to pack the drug, add additional menstruum until it does cohere. This will guard against swelling in the percolator, and is a precaution well worth noting.

Pressing the Powder.

When the drug has been transferred to the percolator, shake it down lightly first, then carefully stamping the percolator upon the floor or table (protected by a piece of rubber or cloth, to guard against breakage), and finally pressing it down with a plunger, a common potato-masher being a very efficient tool for this purpose.

Many pharmacists transfer the powder to the percolator in portions, usually one-fourth at a time, and press down each portion separately. This is perfectly proper, but the greatest care and skill is required that the pressure may be uniform throughout.

Upon the degree of care used in packing the drug in the percolator will depend, in a great measure, the quality of your finished preparation.

As a general rule, you can be guided by the following: When the drug itself is in fine powder and the menstruum is strongly alcoholic, the powder can be packed firmly; such drugs are Aconite and Belladonna roots, Henbane, Lobelia, etc. When the powder is coarse and the menstruum largely aqueous, it is packed more loosely, and, moderating between these extremes the packing becomes more firm in proportion as the powder becomes finer and the menstruum more alcoholic.

Saving Money by Percolation.

Tincture of Digitalis, U. S. P., made with a superior quality of Digitalis Leaves and Diluted Alcohol, by percolation, costs 25c per pint to make.

The purchased Tincture costs, net, from 55c to 74c per pint, and naturally never is any better than the kind the pharmacist can make.

These figures may not appear startling, being amounts of less than one dollar, but the proportion holds good with your entire line of pharmaceuticals.

Your annual savings are much more than half, and if your yearly purchases of ready-made pharmaceuticals amount to only \$200, you would save at least \$100 by making them yourself.

In twenty years of business life this means an added item of profit of \$2,000—enough to build you a nice home.

CHAPTER XLIV.

The next step in the process of percolation is to place a piece of round filtering paper on the surface of the powder.

This should be somewhat larger than the diameter of the surface of the powder, scored, and a weight of some kind placed upon it to prevent it from floating out of place.

The object of this paper is to equalize the distribution of the menstruum and to prevent the powder from becoming displaced.

As the menstruum is poured upon this weight and traverses the powder in its downward course, you will at once observe that the packing has been performed properly by the uniform descent of the liquid on all sides of the packed drug.

The Second Maceration.

Enough menstruum should be added to thoroughly saturate the powder and leave a stratum above it.

In this condition the percolator should remain from 24 to 48 hours—24 hours in the case of tinctures containing 20 per cent of drug or less, 36 hours for stronger tinctures, and 48 hours for fluidextracts.

Sometimes this period can be shortened with advantage, providing the drug is readily extracted, and often when time permits, three days may be allowed for maceration in the case of drugs of more difficult extraction.

Percolating.

The actual process of percolation now begins and its success depends largely upon the rate of flow. If a fluidextract is being made not more than 5 drops per minute should be allowed to flow, and if the drug is difficult of extraction or contains powerful principles, 2 drops per minute should be the limit of flow.

For tinctures the flow should be about three times as fast and according to the drug, from 6 to 15 drops per minute.

The flow must be controlled and carefully regulated, and this is best accomplished by having the rubber tube of sufficient length for the bottle receiving the percolate to be raised or lowered until the desired rate of flow is obtained.

A flow of 5 drops per minute will equal 300 drops, or approximately $\frac{1}{2}$ fluidounce per hour. Hence the time consumed in percolating a quart of fluidextract should never be less than 64 hours. And for a like amount of tincture, the time should never be less than 21 hours.

Things to Avoid.

Never allow the menstruum to disappear entirely from the surface of the powder, otherwise fissures will form in it through which the liquid leaks and imperfect extraction results.

Avoid haste. The preparation may some time be the link between the life and death of a person, and if you have taken proper precautions and attended to details, the results in the patient's condition will show it.

Although it has been often mentioned, it will bear emphatic repetition, that all inferior crude drugs must be avoided. The therapeutic action that the physician expects in a drug is only present in the best grade and quality of superior crude drugs.

The process of percolation is so simple, and yet so effective, that no druggist should fail to become an expert at it. While care should at all times be exercised and details carefully watched, the whole process is one that simply calls for the intelligent display of common sense.

Fractional Percolation.

A process that finds favor with many pharmacists is the one called fractional percolation and is used in making fluidextracts.

It avoids the use of heat in these preparations entirely and is therefore a valuable process, although it requires considerable time.

A convenient amount of drug, say 1,000 Gm., is divided into three parts, as follows: Part 1, 500 Gm.; Part 2, 325 Gm., and Part 3, 175 Gm.

Part 1 is moistened and percolated in the manner already described, and the first 175 Cc. are set aside, as "**Reserve Percolate No. 1.**" The percolation is then continued until a further 1,325 Cc. of percolate are obtained, which should be divided into several portions, marked respectively "Additional Percolate 1, 2, 3 and 4."

Part 2 of the drug is now moistened with Additional Percolate No. 1, and percolated as usual, with Additional Percolates No. 2, 3 and 4, successively.

The first part of this second percolation, 325 Cc., is set aside as "**Reserve Percolate No. 2,**" and the process continued as before, until a further 650 Cc. of percolate is obtained, in successive portion, and which may be marked "Second Additional Percolate 1, 2, 3, etc."

Part 3 of the drug is now moistened with the No. 1 of the Second Additional Percolate, and percolated successively with the remaining portions, 2, 3, etc., until 500 Cc. are obtained. This is **Reserve Percolate No. 3,** and completes the process.

The three reserve percolates are then mixed and constitute the finished fluidextract.

Comparing Cost.

Some pharmacists still purchase the Fluidextract of Wild Cherry, which, if made according to the U. S. P., costs only 32c per pint, while the purchased product costs anywhere from 90c up to \$1.27 per pint.

This is one of the simplest of preparations that the pharmacist makes and there should exist no excuse for buying it.

No heating or repercolation are necessary.

This fluidextract and the Fluidextract of Malt, N. F., are forerunners of what we may and should expect in future editions of the U. S. P. and N. F., as regards the preparations of fluidextracts, namely, the avoidance of heat and more simplified processes.

CHAPTER XLV.

Physicians are at times at a loss to prescribe a suitable combination or suitable remedies in certain indications.

The reason for this is often found in the inefficiency of the teaching in medical schools, commented upon at various times in these chapters, the effrontery of the nostrum peddling detail man and possibly other causes, and a little reminder from the pharmacist often acts as a stimulant.

While the following combinations are well worthy of a physician's consideration, they are not specifics; they are simply good formulas. A pharmacist knows that such drugs as Blackberry, Geranium, Coto and Bismuth Subnitrate are astringents and act directly by contraction or condensation of the tissues.

He does not know, however, when a condition is present, calling for drugs having such action, nor would he recognize one if he saw it.

A Good Preparation.

But a suitable combination for such astringent action as the following may be just what a physician desires and can appreciate.

R

Bismuth. Subnitrate.	℥ss
Beta Naphtol.	℥i
Syr. Rhei aromat.	f ℥iii
Syrupi.	f ℥iii
Mist. Cretae.	ad. f ℥iii

When your physician patron sees this formula, he will at once recognize in it possibly a valuable remedy for certain forms of diarrhoea in children, and with some modifications, it might be a great assistance to him.

In preparing such a mixture, thor-

ough trituration is necessary to insure the maximum of efficiency.

The Beta Naphtol should first be finely powdered, then the Bismuth Subnitrate and Compound Chalk Powder added, and lastly, enough water to form a paste. To this is added the Syrups, and finally the required amount of Water and Cinnamon Water.

Valuable to Physicians.

At times a physician may be at a loss for a remedy in cases of general debility, and an inspection of a formula on the following plan, may open to him a new line of reasoning.

R

Strychninae Sulph.	gr. i
Ac. Nitro Hydrochlor. dil.	f ℥iss
Tr. Cardamom, Comp.	f ℥iii
Tr. Gentian Comp.	ad. f ℥vi

This preparation has an agreeable bitter taste and should be taken with a large portion of water. We can not always make a preparation as palatable as we would like, for we must bear in mind as a first consideration the therapeutic activity.

The above preparation could undoubtedly be made very pleasant tasting by the addition of syrup, but the physician wants no sugar in such a preparation. He goes on the principle that even a nasty tasting medicine is better than a nice funeral.

Something to Work For.

Physicians have frequently expressed a desire to prescribe a compound containing Compound Spirits of Ether, Asafoetida and Valerian.

They have done so in the belief that if a presentable and fairly palatable liquid mixture could be produced containing a maximum of therapeutic efficiency, they would have one of the greatest aids to the cure of certain nervous disorders that have heretofore baffled their skill.

In preparing such a mixture, many stumbling blocks are met, among the most important to be overcome being unpalatability and impurity of drugs.

The Asafoetida generally found on the market is far from pure or therapeutically active, the powdered ex-

tract of Valerian is very often a faulty representative of this valuable drug, and the genuine Compound Spirits of Ether is not found in present-day pharmacies as much as its merits warrant.

Devising a Mixture.

Any pharmacist sufficiently interested in this particular mixture, should first inform himself whether his medical friends would have use for such a mixture.

If so, find out what objections they have to prescribing the various ingredients, and from the data thus gathered plan your work.

Physicians have often prescribed the Valerian and Asafoetida in capsule form, and these were taken in conjunction with a dose of Compound Spirits of Ether, in cold, sweetened water, but the results, while fairly good therapeutically, were a total failure as far as "taking the dose" was concerned.

Besides, the peculiar-smelling eructitions after a dose had been taken, became offensive to the patient and caused a dislike for the medicine that was extremely difficult to overcome.

This might suggest a combination that would be acceptable to the stomach and prevent these eructitions.

It is a comparatively easy matter to make a therapeutically active preparation by digesting the Asafoetida and Valerian in the Compound Spirits of Ether, but its palatability when thus prepared is a minus quantity.

A Suggestion.

An aromatic, or a combination of such, must be employed to minimize the disagreeable eructitions. Cardamon, Caraway, Canada Snake Root and Yerba Santa suggest themselves, and some of these may be sufficient; but that still leaves the important question open, how can this strongly alcoholic compound be made palatable, without impairing its efficiency?

Probably some pharmacist has the secret; if so, he should advise the author of this book in order that it may be published to the world. His

name will become famous and the preparation will quickly find its place in the National Formulary.

CHAPTER XLVI.

The preparations advocated for exploitation and sampling in September, 1909, were the following three:

Syrupus Hypophosphitum Compositus, U. S. P.

Infusum Digitalis, U. S. P.

Petrolatum Saponatum Liquidum, N. F.

Use none but the highest grade of drugs and chemicals in the manufacture of these preparations. Then the physician will get the results he is looking for and the nostrum will lose interest for him.

Infusum Digitalis, U. S. P.

Digitalis	15 Gm.	\$0.02
Alcohol	100 Cc.	.08
Cinnamon Water	150 Cc.	.01
Boiling Water	500 Cc.	.01
Cold Water, to make.....	1,000 Cc.	.00

Cost per.....1,000 Cc. \$0.12

In an infusion jar, casserole or other suitable vessel, place the bruised Digitalis, pour the boiling water upon it and macerate for one hour.

The vessel should be covered and the mixture stirred occasionally. Now strain and add the Alcohol and the Cinnamon Water to the strained liquid. The Alcohol and Cinnamon Water must not be added to the residue of Digitalis leaves on the strainer, but directly to the strained infusion.

Cold water is then passed through the residue on the strainer until the product measures 1000 Cc., and the whole is then thoroughly mixed by agitation.

When the infusion has stood a day, it may be filtered, which will add much to its appearance and assist in its preservation.

No more of this preparation should be prepared than will be used within a reasonable length of time, about four or six weeks, although if filtered and preserved in a well corked bottle, in a cool and dark place, it will retain its virtues for at least six months.

Syrupus Hypophosphitum Compositus, U. S. P.

Calcium Hypophosphite .	35.00 Gm.	\$0.06
Potassium Hypophosphite	17.50 Gm.	.04
Sodium Hypophosphite .	17.50 Gm.	.04
Ferric Hypophosphite ...	2.25 Gm.	.02
Manganese Hypophosphite	2.25 Gm.	.02
Quinine (alkaloid)	1.10 Gm.	.02
Strychnine (alkaloid) ...	0.115 Gm.	.01
Sodium Citrate	3.75 Gm.	.01
Diluted Hypophosphorous Acid	15.00 Cc.	.03
Sugar	775.00 Gm.	.08
Water, q. s., ad.....	1,000.00 Cc.	.00

Cost per 1,000 Cc. \$0.33

This is at an approximate cost of 15c. per pint. Make three separate solutions as follows:

(a) In a mortar, rub the Iron and the Manganese salt, separately, to a powder and with the Sodium Citrate, introduce them in a large test tube or a glass flask. Add 30 Cc. of water (preferably distilled), and heat gently until solution is affected.

(b) Dissolve completely the Calcium, Potassium and Sodium salts in 450 Cc. of water (preferably distilled), and to which 5 Cc. of the Acid has been previously added.

(c) Dissolve the alkaloids in 30 Cc. of water (preferably distilled), with the aid of the balance of the Acid (10 Cc.), 0.115 Gm. Strychnine is approximately $1\frac{3}{4}$ grains.

Now mix these three solutions, **filter the mixture**, add the Sugar and agitate thoroughly until dissolved.

Then strain the Syrup and add sufficient Distilled Water to make the product measure 1000 Cc. (33 fl. oz. $6\frac{1}{2}$ fl. dr.).

Filtering the mixture of the three solutions makes a very brilliant and more permanent syrup.

Petrolatum Saponatum Liquidum, N. F.

Liquid Petrolatum	8 oz. av.
Oleic Acid	4 oz. av.
Spirit of Ammonia	2 oz. av.

Incorporate the Oleic Acid thoroughly with the Liquid Petrolatum, add the Spirit of Ammonia and mix the whole by agitation.

It is to be noted that all the ingredients are to be weighed, not measured. Care should be exercised in employ-

ing a full strength Spirit of Ammonia, and also to remember that Spirit, and not Water of Ammonia is called for.

As we have so often stated, the one prime requisite in manufacturing these preparations and by the same token all of your preparations, official and unofficial, is to use ingredients that are absolutely pure and of the highest possible grade.

CHAPTER XLVII.

As one of the results of the mailing of the new booklet, "Therapeutic Information," to thousands of physicians, pharmacists will undoubtedly receive prescriptions calling for some of the preparations mentioned in it and which they might not have on hand.

It would be policy, therefore, to secure a copy of this booklet and check off such as you have on hand.

Then look over your stock and see whether you have all the ingredients for those preparations that you do not have on hand.

Important Preparations.

These preparations are all important ones and have been selected with great care. They should form a part of the stock of every well-regulated pharmacy.

Among those preparations that are somewhat out of the ordinary as regards manufacture may be mentioned the Compound Solution of Sodium Phosphate, U. S. P., and the Effervescent Magnesium Sulphate, U. S. P., mentioned under Cathartics; Compound Elixir of Tar, N. F., and Syrup of Lactucarium, under Expectorants.

Effervescent Lithium Citrate, under Diuretics; the Solution of Gold and Arsenic Bromide, under Tonics and Alteratives; the Elixir Pepsin, Bismuth and Strychnine, N. F., under Stomachics and Digestants; Milk of Magnesia, N. F., under Antacids; Elixir Phosphorus and Nux Vomica, N. F., under Miscellaneous, and Flexible Collodion, under Protectives.

An Exceptionally Fine Preparation.

One preparation, namely, Syrupus Asari Compositus, N. F., the Com-

pound Syrup of Canada Snakeroot, is deserving of the greatest popularity.

This is one of the finest and most elegant preparations that you can bring to the attention of your medical friends.

It can be used very often as a flavor, vehicle, adjunct or diluent to prescriptions and the physician will feel very grateful to you for bringing it to his attention.

It has the color to please the eye and the sweetness and flavor to satisfy the palate.

Other Flavors and Vehicles.

The art of preparing vehicles of different flavors and possibly also of various alcoholic content, is a most important one and pharmacists generally should experiment along these lines with the object in view of preparing something new and modern.

While the U. S. P. and N. F. vehicles and flavors are good ones and the seventeen mentioned in the booklet, "Therapeutic Information," are exceptionally valuable, it still remains a fact that something new is very desirable. The one great desideratum, the one great necessity, in preparing a flavoring vehicle is absolute purity of the ingredients and especially so of the essential oils that enter into it.

Without this superior quality of ingredients it is absolutely useless to try to prepare a satisfactory preparation that will appeal to the physician or to the person taking the medicine.

Quality.

There is no one thing that has a greater value in building up a profitable drug business than quality of drugs. It is paramount.

No matter whether it be in the delicate and true flavor of an essential oil that gives value to a vehicle or in the alkaloidal content of a powerful drug and upon which the life of a patient may depend, quality makes your reputation and also protects it.

Never let anything interfere with your one great object, the manufacture of absolutely perfect preparations, both

therapeutically and pharmaceutically.

Everything hinges upon quality. Not only your individual success but the success of the great national propaganda movement fostered by the N. A. R. D.

Make all your preparations so carefully, so exact, so true to formula and from such a standard quality of drugs, that you will need have no hesitancy in giving them to any member of your own family, nor that you would need to be worried about any inspection of them by an agent of the Federal government.

The only reason why we have inferior, cheap and adulterated drugs is because we have given some one a chance to sell them to us. Take that chance away from your source of supplies and it will not be long before the cheap trash disappears from the stock of reputable concerns who supply the retail druggist.

The revival of the practice of making active medicinal preparations, the getting back to first principles in medicines, so necessary in many parts of our country, will take away all the arguments that dispensing physicians and the faddists can bring to bear against the pharmaceutical profession.

The condition that is confronting us is no dream, but an actual fact—we must make better medicines.

CHAPTER XLVIII.

It is a real pleasure to note the increasing pride that pharmacists generally are taking in the manufacture of galenical preparations, not only as regards appearance and palatability, but also in regard to the quality of the drugs used.

This is indeed a good omen and a harbinger of better things to come. It is also timely, and the pure food and drugs law, coupled with the national propaganda movement of the N. A. R. D. as applied to official preparations, did not come one moment too soon.

Nearing a Crisis.

Those physicians who in the past have more or less depended upon nos-

trums for their therapeutic work (and their number is legion) have at last come to the conclusion that the nostrums are inadequate and unscientific.

And furthermore these physicians are realizing that these same nostrums which they have so valiantly championed in the past and that have proven insufficient to do real therapeutic work, are largely the fault of a great loss in the number of their patients.

This brings us back to the great final judgment, a court of last resort, the public. This public as a rule may not know much of science as it pertains to medicine, but somehow or other it has come to the conclusion that the medicine it was getting was not doing the work that it expected and hence many people have gradually drifted away from all medicines. Therefore we can say truthfully, we are nearing a crisis. And the only thing that can turn the scales in favor of the pharmacist is a rigid adherence to quality in the manufacture of all his preparations and a radical stand against the nostrum.

Practical Work.

Applying the foregoing principles practically, we will take one preparation from the N. A. R. D.'s epitome, entitled "Therapeutic Information," a booklet that every pharmacist should possess, and see what can be done with it.

Turning to page 30, under Vehicles and Adjuvants, we find our old, much-used and much-abused friend, Syrupus Glycyrrhizae, N. F.

There is no reason why every pharmacist should not be able to make this syrup absolutely perfect, clear and free from any suggestion of an acrid and nauseating taste.

Purity Very Important.

The only way to do this is to make sure that your "Pure Extract of Glycyrrhiza" is pure. A most commendable way of doing this is to make it yourself, a very simple process.

The formula given in the pharmacopoeia gives a very superior preparation, as follows:

Glycyrrhiza, peeled, in No.	
20 powder	1,000 Gm..\$0.31
Ammonia Water	150 Cc.. .03
Glycerin, about	12 Gm.. .01
Water, q. s., to make about	250 Gm.. .00

Cost of material for 250 Gm.....\$0.35

The Ammonia Water is mixed with 3000 Cc. of Water, the powdered Glycyrrhiza is moistened with 1000 Cc. of this mixture and allowed to stand for 24 hours in a tightly closed vessel.

The powder is now packed moderately firm in a cylindrical glass percolator and the remainder (2000 Cc.) of the menstruum poured upon it.

When this menstruum has disappeared, enough water is used as a menstruum to exhaust the Glycyrrhiza. Exhaustion of the powder is manifested by an absence of color and taste.

The liquid is now transferred to a tared porcelain evaporating dish and evaporated to a pilular consistence on a water bath, evaporating the last portion of the percolate first.

Preventing Scorching.

It is important that the evaporation be performed on a water bath, and not over a naked fire, otherwise there is great danger of burning the extract, and instead of getting a fine sweetish extract, it will be acrid and disagreeable.

While the mass is still warm, it is weighed in the vessel containing it, the weight of the vessel is subtracted from this weight, and then 5 per cent of Glycerin is thoroughly incorporated with the extract.

The yield is about 22 to 25 per cent, and the cost, including the cost of the source of heat, is about 80c per lb.

None Other to Be Used.

This extract, and none other, is the one to be used in the preparation of the official N. F. syrup. It is completely soluble in water, thus producing a clear syrup and one possessing a very agreeable and sweetish taste, that every one of your physician patrons will take delight in prescribing.

For some reason or other, it has been an almost universal practice to prepare this syrup from the impure, nauseating and acrid powdered extract and as a

result, the pharmacist had a syrup that soon soured, precipitated, never was clear, and foamed excessively. This rendered manipulation exceedingly difficult and tedious in such cases where a prescription called for "Syr. Glycyrrhizae, q. s." and the pharmacist inadvertently shook the mixture, causing a foam which entirely filled the container and which is only gotten rid of with difficulty.

Another Case.

Again using this pure extract, as required in the Brown Mixture, official in the U. S. P. and mentioned on page 8 of "Therapeutic Information," you will notice a decided difference in appearance and taste from what it had when made with the Powdered Extract of Licorice.

So we see what a wonderful change is produced in the looks, taste and activity of a preparation by using quality drugs.

Study and prepare all the preparations mentioned in "Therapeutic Information" in a manner similar to the Syrup of Licorice and Brown Mixture mentioned and you will be well on the road to professional and financial success.

A Much-Sought-After Booklet.

This booklet, "Therapeutic Information," is today in the hands of possibly more physicians than any book of a similar nature and as it is valuable, you may be sure it is earnestly read.

Therefore, see to it that all your preparations and especially those mentioned in the booklet, are exactly as the physician expects to find them, perfect.

Much depends upon your preparations, aye, everything—your success and the success of pharmacy. In this present crisis, the pharmacist's preparations are on trial for their very existence and they dare not be found wanting.

CHAPTER XLIX.

There is one great fault that some druggists possess in common with members of other crafts, tradesmen, professional workers and manual laborers.

It is their neglect to read current literature, both the class journals and text books, dealing with the affairs of their particular calling. Somehow or other, the delinquents in the pharmaceutical profession seem to have the erroneous impression that they can "run a drug store" without being prepared for it. There is no excuse for anybody who is able to pass the state board of pharmacy saying that he cannot prepare the simple preparations of the U. S. P. and the N. F.

NOTES, the weekly journal of the N. A. R. D., has given the druggists of this country a post-graduate course in pharmacy (this book being a part of such), and this has been of such value to those who have profited by the information given therein that they have materially increased their daily receipts and also raised their standing in the community, both with the physician and the laity.

This shows that the druggists need the information which this journal has furnished them, and which apparently can not be derived from other sources.

Work for Local Associations.

In the opinion of the author, a vast amount of good can be accomplished from the missionary work that every local association of retail druggists should perform, and can perform, if they will have more frequent meetings and debate on the important laboratory and propaganda problems that daily confront them.

Druggists should realize that they cannot practice their profession intelligently, with success financially, unless they are familiar with the details of the various pharmaceutical operations, even though they possess a diploma or a certificate of registration. They should purchase the necessary apparatus to do first-class work and by studying the practical part of the work in such books as Remington's or Arny's "Pharmacy", and Beal's or Scoville's "Dispensing", they will soon become proficient laboratory workers.

A pharmacist is made, and made only by study and intelligent application of principles. He does not grow

into his calling without effort, for then every man, woman and child would be one.

Apparatus for Laboratory.

If you have such apparatus as the following and learn how to use it by the application of common sense and such knowledge as the text books and pharmaceutical journals give you, you can make yourself a master in your profession:

Two percolators, of 1 gal., and $\frac{1}{2}$ gal. capacity; three ribbed funnels, of 1, 2 and 4 pint capacity; one drug mill; a 1 gal. iron mortar; a $\frac{1}{2}$ gal. evaporating dish; a $\frac{1}{2}$ gal. granite-ware casserole with cover; a gas, alcohol, kerosene or wood stove; a water bath; tincture press; scales, with avoirdupois, troy and metric weights; a strainer with frame and stand; one or more graduated bottles.

In addition to these must, of course be added other equipment, such as the graduates, spatulas, filter paper, mortars, pill and tablet machines, etc.

Comparing the Pharmacist.

Compare your profession with any other, or with any trade, and you will find that in the others, only those are really successful and have any business worth speaking of, who study their art or science and have first-class tools to carry on their work in a practical manner. What does a carpenter amount to who does not know how to get shingles onto a roof and who has no first-class tools? A physician who does not recognize a carbuncle or who has no sharp knife to lance it?—is he of any consequence?

A druggist has absolutely no alternative but to study pharmaceutical operations and with first-class apparatus he will be able to carry out these operations to a practical conclusion. He has no choice other than that. Besides, the work is so simple when gone at intelligently, and so interesting, that as soon as a love for it is created, it makes you an enthusiast at your profession.

Neglecting to contract the habit of studying the principles of pharmaceutical operations and the consequent

inability to correctly prepare preparations which follows, is the main reason why pharmaceutical manufacturing houses make and sell so many preparations that the pharmacist should prepare and dispense.

Where Nostrums Are a Rarity.

In those localities where pharmacists prepare good standard preparations and have had the good sense to inform the physicians of that fact, we find few prescriptions calling for nostrums or for any special maker's preparations.

And this brings us back to the old nostrum question, for some houses, seeing how easy the physicians were, forgot all about honor and science and began putting up the fraudulent nostrums, and naturally put them up as cheaply as possible.

The result is that the physician finally becomes disgusted with the great majority of proprietary preparations, and is looking to the pharmacist to uphold scientific pharmacy and to furnish him with reliable medicines.

It resolves itself into a clear-cut business proposition for the pharmacist, and he must so conduct himself and his pharmacy that he will "make good"; not only one pharmacist, but every one in the country should do this.

The peculiar part of the matter is that when a competitor comes along and locates near the pharmacy, as a new cigar store, and who takes a few dollars in trade away from the pharmacist, he grumbles about competition, and all the other supposed evils of the drug business.

Ruinous Competition.

But to vital competition, the competition that is robbing him of his real business as a pharmacist, the nostrum factories that make everything a pharmacist should make and sell to physicians, to these he offers no resistance.

Come, American pharmacists, prepare your own preparations, put your shops in order and fight for your rights and your professional good name.

CHAPTER L.

Three suitable preparations with which to sample physicians are the Compound Acetanilide Powder, U. S. P., the Syrup of the Bromides, N. F., and the Compound Syrup of Canada Snake-Root, N. F.

The oft repeated statement, "Buy none but quality goods," is again appropriate here, for none but the very best grade of drugs is permissible in the manufacture of medicinal preparations, and from such and such only will the physician get the results that he is looking for.

This quality argument is peculiarly appropriate in the manufacture of the above three preparations, for the reason that Acetanilide, Sodium Bicarbonate, Bromides and some of the other ingredients entering into their composition, are often found of two or more grades in the market.

Always specify on your orders pure, or U. S. P., quality and accept none other.

**Pulvis Acetanilidi Compositus,
U. S. P.**

Acetanilide 70 Gm.. \$0.05
Caffeine 10 Gm.. .12
Sodium Bicarbonate.... 20 Gm.. .01

Cost 100 Gm.. \$0.18

Powder the Caffeine finely and mix the Sodium Bicarbonate with it. To this add the Acetanilide, previously finely powdered, and mix the whole thoroughly.

Use the alkaloid Caffeine, pure Sodium Bicarbonate and the best quality of Acetanilide obtainable, as the value of this preparation depends upon the purity of the ingredients.

If this is right, the preparation will prove of great value to the physician and it will be a dependable therapeutic agent.

The price of this powder is approximately 6c per ounce. Compare this price with the outrageous price of nostrums of somewhat similar composition, which sell for from \$1.00 to \$2.30 per ounce.

Syrupus Bromidorum, N. F.

Potassium Bromide.... 80 Gm.. \$0.05
Sodium Bromide..... 80 Gm.. .07
Ammonium Bromide... 50 Gm.. .05
Calcium Bromide..... 25 Gm.. .04
Lithium Bromide..... 8 Gm.. .03
Tincture Vanilla 82 Cc.. .20
Compound Tincture
Cudbear 16 Cc.. .02
Compound Syrup Sarsaparilla 450 Cc.. .28
Syrup, q. s., to make.. 1000 Cc.. .04
Cost 1000 Cc.. \$0.78

Dissolve the Bromides, which should be pure, in the Compound Syrup of Sarsaparilla and about 300 Cc. of the Syrup, add the two tinctures, and finally enough Syrup to make the product measure 1,000 Cc. This forms an elegant syrup, of a nice brownish red color and permanent.

Should it show the least sign of cloudiness, it should be filtered, so that it may be sparkling clear.

The cost of this Syrup, about 36c per pint, compares very favorably with the numerous, somewhat similar, nostrums on the market and which cost all the way from \$1.34 to \$3.40 per pint.

It should be apparent to even the most indifferent pharmacist, that if he succeeds in having his prescriptions read U. S. P. or N. F., in place of So-or-So's nostrum, it must make an enormous difference in his net cash receipts at the end of the year. For instance, let us compare the cost of only a few official preparations with that of the nostrums and "special-makes" prescribed:

Official Preparations.	Per oz.	The Nostrums and Special Makes.	
		Per oz.	
Pulv. Acetanilidi Comp.....	6c	From \$1	to \$2.30
Syrupus Bromidorum.....	2 1/4c	From 8 1/2c	to 21c
Syr. Hypophos. Comp.....	1c	From 3c	to 8c
Syr. Hydriodic Acid.....	1/2c	From 3c	to 7 1/2c
Pulv. Antisepticus.....	1 1/2c	From 6c	to 17c
Liquor Antisepticus.....	3/4c	From 2 1/2c	to 5c
Liq. Antiseptic, Alk.....	1/4c	From 3c	to 5c
Ellox. Gentianæ Glyc.....	1 1/4c	From 3c	to 7c
Essentia Pepsini.....	2 1/2c	From 4c	to 8 1/2c

The better financial status being assured, all the retailer's energies and resources should be used in preparing quality preparations and then use his brains in devising the best advertising scheme to get the doctors to prescribe them.

Syrupus Asari Compositus, N. F.

Asarum root	62 Gm..	\$0.05
Alcohol	200 Cc..	.15
Cochineal	1.5 Gm..	.01
Potassium Carbonate.	2.5 Gm..	.01
Wine of Ipecac.....	30 Cc..	.06
Sugar	725 Gm..	.09
Water, q. s., to make.	1000 Cc..	.00

Cost1000 Cc..\$0.37

Reduce the Asarum (Canada Snake-Root) to a moderately coarse, No. 40 powder; powder the Cochineal finely and mix it intimately with the Potassium Carbonate, and then mix this powder with the Asarum.

Make a menstruum with the Alcohol and 375 Cc. of Water, moisten the mixed powders with 24 Cc. (6 fluidrams) of it and allow it to macerate for 24 hours in a tightly covered vessel.

Then again thoroughly stir the moistened powder and at once transfer it to a small glass percolator, packing it down moderately firm. Add the balance of the menstruum.

Proceed slowly with the percolation, and when all the menstruum has disappeared, follow it up by adding Water, and percolate to 500 Cc.

In this 500 Cc. of percolate, dissolve the Sugar by agitation and to the resulting syrup add the Wine of Ipecac. If the product now does not measure 1,000 Cc., continue the percolation and add enough of the second percolate to make 1000 Cc.

It is of course advisable to add the Wine of Ipecac to the syrup instead of to the percolate to avoid any possible cloudiness. If this syrup is not perfectly clear, filter it through a well-wetted filter. Filtering improves the appearance of every syrup, and should always be resorted to, except in the case of a very few that should contain insoluble matters in suspension. It also makes the syrup more stable, a clear syrup seldom spoiling when made right.

CHAPTER LI.

The more work the pharmacist does in his laboratory, the greater becomes

the need for keeping it thoroughly clean and in order.

There is a great deal of waste that is unnecessary and for which no excuse exists, and the following simple methods as regards "cleaning up" should materially assist in making laboratory work more pleasant.

A Clean Laboratory.

It goes without saying that a clean laboratory, including of course all the apparatus, is a genuine stimulus to more exact and painstaking work, and it is also a grand advertisement for your store as far as the filling of physicians' prescriptions is concerned.

Few druggists realize the permanent impression for good that a clean, nicely-arranged laboratory makes upon the physician, and every pharmacist should therefore have such a one and never lose an opportunity to show it to the physician. It helps to "create a demand," that one great advertising feature of every pharmacy.

The Apprentice.

The simple methods described herewith will often prove to be the starting point in the making of a first-class druggist of the apprentice, for it teaches cleanliness, economy and care, three vital factors in a druggist's life.

Many a practical lesson in chemistry is here taught the apprentice, by learning the use of solvents and cleaning agents that is seldom learned any other way and, once understood, will prove of great practical value ever after.

While it may be aggravating at times to instruct your apprentice in these little details, we must never forget that when he can once do good work he will repay you a hundred-fold afterwards by work well done.

You cannot teach your apprentice too many little details, for every one will be a direct benefit to you later on. Waste some of your time and pennies now, if you consider it a waste, but it will surely come back to you in "ease" and "dollars" when the apprentice knows how to work. Look ahead into the future and shut your eyes to the present once in a while.

A good, well-trained apprentice will always be an honor to pharmacy later on, and we cannot have too many of them.

Cleaning Up.

Before cleaning a bottle, consider whether it will pay. Is it worth the chemical you will use in cleaning it? If it is not, throw it away. Labor, of course, should not be counted in this cost, for that supplies the experience to the apprentice.

Always use water first, unless the nature of the cleansing clearly forbids it. Soap is the next in importance and economy. If a bottle or graduate has contained Tincture of Iron, or Lead or Lime solutions, water will clean it effectively, if used at once and before they have dried in the vessel to be cleaned. If soap were used on these first, there would surely be a mess to clean, for a very tough and tenacious mass would result that would prove difficult to remove.

Economy is the one great desideratum in the getting together of a cleaning outfit. Such substances as the following should find a convenient place near the sink with such others as your experience has proven to be serviceable:

Various Cleaning Agents.

Powdered pumice stone is excellent for scouring wedgewood mortars and pestles and brightening spatulas.

Sawdust is essential in cleaning greasy ointment mortars and spatulas and for soaking up oil, paint and grease from the floor.

Bicarbonate of Soda is excellent as a general cleanser when used with enough water to make a thin paste, and is especially valuable to thoroughly cleanse greasy vessels, after the sawdust has done the crude or primary cleaning.

Sand brick, the kind the old folks used for polishing table knives and forks, is efficient for scouring and polishing spatulas and other steel utensils.

Shot is a very useful article, but only so when used intelligently; when the least bit greasy it is worse than useless, and it often leaves peculiar lead

marks on the glass that can only be remove with strong Nitric Acid.

A much more effective method than shot is the use of a wire, paper pulp and pumice stone, this combination even removing many resinous stains and spots. Bird gravel is also a most excellent cleanser, having replaced shot in many pharmacies.

A solution of crude caustic potassa is excellent for removing all stains of a resinous character and will quickly remove Prussian Blue also; it is more satisfactory and much more economical for these purposes than Alcohol, Ether, Benzine or Chloroform.

Ammonia Overrated.

Turpentine readily removes tar, wax and resin. Ammonia, contrary to general expectations, is of little value, except in removing or neutralizing fresh acid stains on clothing.

Carbonate of Sodium is excellent in removing Cod Liver Oil, Fish Oil, etc.

Muriatic Acid is useful for bottles that have contained solution of iron salts, lime water, etc., and also to remove the last traces of Zinc Oxide ointment from mortars which have first been cleansed with sawdust.

Sulphuric Acid is a very effective cleanser and will remove any dirt of a vegetable or oily nature when all else fails; care is necessary in handling it, however, as it makes a painful burn when dropped on the skin. In case of burning by Sulphuric Acid, a liberal douching with water is the best remedy.

The above agents, with hot water, wood alcohol and a solution of soap in diluted alcohol, are sufficient to do all the cleansing generally called for in a laboratory.

Other Helpful Hints.

For putting a perfect polish on plate glass use precipitated chalk. For all brass work use rotten stone. Make use of a chamois skin at every opportunity, as it brightens things up wonderfully. But do not use a brand new one on any fine work, as it is liable to scratch; it should first be softened by kneading well in the hand and then rubbing hard polished wood with it.

To remove anilin stains from the skin, use successively a 5% solution of common salt, Peroxide of Hydrogen, and lastly, Alcohol.

To remove silver stains from the fingers, dip them into a mixture of Copper Sulphate 8 parts, Hydrochloric Acid 2 parts and Water 90 parts; then wash in a solution of Sodium Hypo-sulphite with much rubbing and finally rinse in clear water.

Sponges used about the fountain should be washed every three days in a warm, 5% sal soda solution, which will remove any grease or bad smell.

To clean the hands well and quickly, make a heavy lather of a good soap in your hands, dip them into bran and rub until the suds have disappeared, then rinse in warm water and dry thoroughly.

Persons suffering with rough, cracked or chapped skin, should repeat this operation at least six times a day, using very hot water the last time just before retiring, and always following this with the thorough application of a good emollient, as Cold Cream, Petrolatum, Glycerin and Rose Water, or Boric Acid Ointment with the aid of a few drops of water.

These few facts should also prove excellent talking points in the sale of a preparation for chapped skin, etc.

CHAPTER LII.

The subject of toxicology is an important one to the pharmacist and the information given in this article is deserving of careful study, as its practical application may often be the means of saving a life.

In all cases of poisoning, the very first thing to be done is to send a hurry call for a physician. This should never be neglected.

The antidotes, as given in this article, should always be found in an accessible place in the pharmacy and should never be interfered or tampered with.

For convenience in study, the poisons are grouped in classes, and as it often happens that persons who have swallowed poisons are unconscious, a

familiarity with the symptoms of the various classes becomes of great value. Promptness in administering antidotes is imperative.

Class I: Corrosive Poisons.

The corrosive acids, such as Acetic, Hydrochloric, Nitric, Sulphuric, Oxalic, Citric and Tartaric Acids, head the list.

The predominant symptoms of poisoning from these products are as follows: Intense burning pain, vomiting and purging of mucous and bloody material, and collapse. The patient is restless, complains of thirst, and if vomiting does not occur, it is always attempted.

First aid treatment consists in antagonizing the poison by large quantities of some mild alkali, calcined magnesia and chalk being excellent; the carbonates of soda, calcium, potassium and magnesium, whiting and soap are also effective, and wall-plaster should be used in the absence of other antidotes.

For Nitric and Oxalic Acid, the only safe antidotes are the carbonates of Magnesium and Calcium.

Calcined Magnesia is preferable to any carbonate (except for Nitric and Oxalic Acids), as the inconvenience of a large quantity of gas in the stomach is avoided.

Further treatment by the pharmacist in the absence of the physician consists next of administering demulcents to protect the stomach, as mucilaginous drinks, eggs, milk, or bland oils, especially Olive Oil.

Pain must be relieved with full doses of opium or with morphine hypodermically, and should collapse occur the application of external heat and the free use of stimulants is necessary.

Avoid the use of emetics or the stomach pump.

Class II: Phenol Group.

To this class belong Creosote, Carbolic Acid, Resorcin, Guaiacol, etc.

Symptoms of poisoning are; a burning pain, nausea and vomiting are often present, unconsciousness and almost simultaneous failure of the heart and respiration early. The skin is cold,

clammy and pallid, the pupils contracted, deep snoring-like breathing, the face has an anxious expression, and collapse usually appears early. The odor of the breath and the white corrugated patches on the mucous membrane of the mouth are characteristic. The pulse is rapid, but feeble.

Of special value in treating these cases is Alcohol and a soluble sulphate (as Epsom Salts). Two or three ounces of diluted Alcohol should be poured in the stomach through a tube and then the stomach should be washed with dilute solutions of Epsom Salts. In the absence of a stomach pump large quantities of Epsom Salt solution should be administered.

The application of external heat is important, demulcents and Opium should be given to relieve pain, and irritation. Stimulants should be administered or injected subcutaneously to prevent or overcome shock.

Class III: Cyanogen Group.

This class includes such sedative poisons as Hydrocyanic Acid (Prussic Acid), Oil of Bitter Almonds and Cherry Laurel Water, Nitrobenzole (Essence of Mirbane), Cyanide of Potassium, etc.

Symptoms are nausea, giddiness, debility, hurried pulse, slow respiration with prolonged expiration, the eructations having the characteristic odor, weight and pain in the head, spasms, tetanus, widely dilated pupil, protruding eyeballs, frothing at the mouth and involuntary discharge of urine and faeces.

Owing to the rapid development of fatal effects from this class of poisons, relief must be immediate, as the respiratory center is paralyzed and the patient chokes. Ammonia, but not in a very concentrated form, should be inhaled or swallowed, cold douches applied to the head, hot and cold douches to the chest, thorough stimulation, and atropine administered hypodermically. Use artificial respiration.

Class IV: Caustic Alkalies.

The class includes the caustic alkalies, as Potassa, Soda, Ammonia and their caustic carbonates.

Their action is violent and caustic, give an acrid taste and great heat in the throat with destruction of the lining membrane. Swallowing is difficult and painful, bloody matter is vomited and purged, acute pain is present in the stomach, cold sweats and hiccough are induced and finally stupor or coma result.

Treatment consists of the administration of vegetable acids in solution, as Citric or Tartaric Acids, vinegar or lemonade, to neutralize the alkali, and subsequently, such fixed oils as Olive, Linseed or Almond Oils. These form soaps with the free alkali, thus destroying their caustic action and also acting as demulcents. Opium, in full doses, should be given for the pain, after the antidotes have been administered.

Class V: Arsenic Group.

This class includes Arsenic and its various combinations, Paris Green and the many Cobalt and Arsenic rat poisons.

The predominating symptoms are a violent burning pain in the oesophagus, stomach and bowels, colic, tenderness on pressure, vomiting and retching, persistent thirst, muscular cramps, difficulty of speech, respiration rapid and labored, clammy sweats and livid extremities, swollen face followed by collapse and red and sparkling eyes.

Treatment should consist of inducing vomiting with an emetic of Zinc Sulphate or Mustard, if it does not already occur, and in administering at once the chemical antidote "Ferric Hydroxide with Magnesium Oxide." This preparation is official in the U. S. P., and its separate ingredients should always be kept on hand, as there directed.

It should be given in four-ounce doses. After-treatment is the same as with other irritants and includes such demulcents as the fixed oils, flaxseed or slippery elm tea, with full doses of Opium or Morphine hypodermically for the pains.

CHAPTER LIII.

Class VI. Metallic Irritants, Etc.

The class includes all such metallic and earthy irritants that are not classified separately, as Barium, Lime, Lead, Bismuth, Copper, Gold, Iron, Mercury, Silver, Tin, Zinc, Chromium and Antimony.

The predominating symptoms in poisoning here are violent burning pain in the stomach and vomiting, Diarrhoea and headache are also almost always present, as is the disagreeable metallic taste in the mouth. Whenever possible, patients should be asked if this metallic taste is present, as this, with a few other predominant symptoms, will usually tell the pharmacist what specific metal is the poison and thus antidotes can be administered more promptly and effectively.

Supplementary Symptoms.

In the case of Barium and Lime there is great weakness of the muscles; Antimony produces colicky pains and violent cramps, a pinched face and a slow, almost imperceptible, pulse; Bismuth produces hiccough and also cramps; Copper produces symptoms similar to Arsenic, except that Copper produces epileptiform convulsions, the patient falling down; Gold produces a pink stain to the flesh, especially about the lips and inside the mouth; in Iron poisoning the vomiting and purging is constant, the pain in the constricted throat is violent and the skin cold; Lead produces paralysis, rigidity of abdominal muscles, the pain is intermittent, colic is violent, sweetish taste in mouth, increased flow of saliva and great thirst; Mercury gives a tight and burning throat, pulse small and irregular and a tendency to doze; in Zinc the eyes are very dull, the pulse flutters and the vomiting is always very violent.

General and Special Antidotes.

As vomiting is rarely absent in these cases, immediate attention should be directed to the administration of antidotes, of which albumen in the most readily obtained form is the best; the most effective being the raw whites of

half a dozen eggs; if these are not obtainable use milk, or flour mixed with water. Then, should vomiting cease, again promote it with warm water to which has been added Bicarbonate of Soda or Mustard.

If the poison is known to be Barium, use Epsom or Glauber salts. If Lime, give vinegar or lemon juice; If Antimony, give Tannic Acid in warm water promptly. If Copper, give Yellow Prussiate of Potassium first, then albumen, but no vinegar. If Gold, give Sulphate of Iron. If Iron, give Carbonate of Soda. If Lead, give soluble sulphate (Glauber salt or Epsom salts) for the soluble salts and dilute Sulphuric Acid for the insoluble salts. For Mercury, albumen is a prompt and effective antidote. For Silver, give common salt dissolved in warm water. If Zinc, the violent vomiting should be relieved by copious draughts of warm water, with a little Carbonate of Sodium dissolved in it. If Chromium, give Calcined Magnesia and then use the stomach pump, or promote vomiting with mustard.

General principles are to be observed in the after treatment, as Opium or Morphine for pain, applications externally of cloths wrung out of hot water for inflammation and demulcent drinks or bland fixed oils internally.

The volatile oils act much like the irritant poisons and are recognized by their odor. Give emetic of Mustard, then a purge of Epsom salt and finally demulcents.

Class VII. Special Irritants.

A class of special irritants, acting much as the above metallic irritants include Phosphorus, Iodine, Bromine, Iodide of Potassium, Rat Pastes, etc.

The special symptoms in the case of Phosphorus are the characteristic taste and odor, burning pain in stomach and bowels; diarrhoea is prominent and the abdomen very tender. The other members of this class produce a burning pain in the throat, a lacerating pain in the stomach, and a fruitless effort to vomit. The saliva runs freely, the pulse is feeble and an excessive thirst is present. Excessive pain and tenderness at the pit of the stomach.

Treatment in the case of Phosphorus consists in giving an emetic of Copper Sulphate (two grains in warm water every few minutes), then large draughts of Milk of Magnesia or Calcined Magnesia suspended in water. Give no oils or fats; subsequent treatment consists of a purgative ($\frac{1}{2}$ oz. Epsom salt in a large draught of water) and Opium in full doses for pain.

Iodine poisoning should be treated with starch mixed with warm water and which also induces vomiting and which must be promoted at all hazards. Subsequent treatment is best left to the physician, as regards inflammation, etc., although full doses of Opium should be given for the pain.

Class VIII. Anaesthetics and Alcohol.

To this class belong alcoholic liquors, Ether, Chloroform, Chloral and other drugs causing insensibility, benzine, gasoline, etc.

The symptoms are intoxication, stupor, rapid pulse and generally complete insensibility, with paralysis of one side. The countenance is swollen and of a dark red color (blue if Ether). The breathing is difficult, often with a snoring sound and the lips are often puffed. The smell of the breath is generally an indication of the particular poison present.

Treatment consists of giving a powerful emetic, preferably a tablespoonful of mustard mixed with a copious draught of warm water. If the patient cannot swallow, convey the emetic to the stomach with a tube. Give clysters or enemas of salt and warm water by the rectum. Apply heat externally; if alcohol, keep patient erect and apply cold wet cloths to head, otherwise lay patient down with head low. If extremities become cold, warmth and friction must be used perseveringly. Use artificial respiration if necessary. Electricity is efficient and hypodermic injections of ammonia, strychnine or atropine are necessary, to stimulate the circulatory and respiratory centers.

Class IX. Gases.

This includes nearly all gases or fumes of a poisonous nature, as Chlorine, Ammonia, Coal Gas, etc.

The predominant symptoms are violent irritation of the organs of respiration, coughing with bloody expectoration, inflammation of the lungs and generally as after effects in recovery, permanent pulmonary disease.

Those gases that act as poisons through their non-irritant and sedative nature, as carbonic acid, coal gas, illuminating gas, etc., produce all the symptoms of apoplexy or narcotic poisoning, manifested in loss of mental power and sensation, loss of motion and by a profound sleepy condition.

Treatment consists of alternate warm and cold applications to the head and chest, friction, mustard plasters, artificial respiration and fresh air when possible. Special treatment for chlorine is the cautious inhalation of ammonia or sulphuretted hydrogen, and vice-versa, although the vapor of vinegar is more reliable for ammonia gas poisoning.

CHAPTER LIV.

Class X. Vegetable Irritants.

This class produces some of the symptoms peculiar to the metallic irritants and volatile oils, except as noted below. It includes quite a large number of drugs, some important ones being Jalap, Aloes, Colocynth, Savin, Cubebs, Crowfoot, Tansy, etc.

The predominating symptoms are an acrid, pungent and bitter taste in the mouth, great heat, mouth and throat very dry, the latter feeling very tight. Vomiting is always violent and prolonged. The pain in the stomach and bowels is very severe and purging is always present. The pulse is strong, rapid and regular, but becomes slow and loses its force as the action of the poison continues. The patient's appearance resembles that of an intoxicated person and insensibility resembling death is generally present.

Treatment consists in easing the vio-

lent vomiting by large draughts of warm water. But if symptoms of insensibility appear without vomiting, this should be induced with an active emetic, like Sulphate of Zinc, after which an active purgative should be given. Further treatment by the pharmacist consists of giving a strong infusion of coffee, then a teaspoonful of a mixture of equal parts of Spirits of Camphor and Spirits of Ether at 15 minute intervals. Demulcent drinks should also be given freely and if insensibility is present, warmth, friction and blisters should be employed.

Class XI. Acronarcotics.

This class is rather difficult to treat under general symptoms, on account of the variety of these symptoms. It includes such drugs as Aconite, Belladonna, Cannabis, Colchicum, Digitalis, Ergot, Hellebore, Ipecac, Poison Oak, Nux Vomica, Veratrum, etc.

The predominant symptoms with almost all poisons of this class are stupor, numbness, heaviness of the head, quickness of breath, great anxiety, dejection and seeing double. Relief must be speedy, otherwise death soon occurs. There is always a desire to vomit, slight at first but this desire soon becomes violent. Pain is not always present but delirium of some kind always.

Special Symptoms.

In addition to the above symptoms Belladonna produces a dry mouth, a flushed face, dilated pupil and a scarlatinal rash. Digitalis produces vomiting, headache, giddiness and convulsions. Nux Vomica (and Strychnine) produces spasms and convulsions with rigidity (very characteristic), the body being bent backward and the eyes are fixed.

Treatment.

The stomach must be evacuated effectually, repeating the emetic, either Mustard with warm water or Sulphate of Zinc, (the former to be preferred), until free vomiting is induced. This can be assisted by tickling the throat with the finger. It is, however, always preferable to wash out the stomach. Large and strong soap enemas should

be injected into the rectum and when vomiting has ceased, an active purgative should be given. All relief measures must be quick.

Stimulation is important, either electro-magnetism, heat externally and friction, whisky or brandy, and artificial respiration.

Subsequent treatment consists in giving alternately a cupful of hot, strong coffee and diluted vinegar.

Chloral and Potassium Bromide are considered antidotes to all alkaloids generally, the former in 25 grain doses, the latter in doses of 240 grains.

If the poison is known to be Aconite, then hypodermic injections of Digitalis or Ether are to be given in addition to the above treatment.

Class XII. Narcotics.

The principal drugs of this class are Coca, Opium, Henbane, etc., with their alkaloids.

The predominating symptoms are a feeling of depression, faintness, dizziness, a rapid pulse, slow breathing, dilated pupils and nausea. With Opium, the symptoms are somewhat modified, being drowsiness, slow respiration and the patient is very sleepy, the breathing being stertorous, and a cold sweat soon appears.

The treatment consists primarily in emptying the stomach, then stimulants and heart tonics should be given especially Nitrite of Amyl or Nitroglycerin. Artificial respiration must be employed if necessary. In Opium the patient must be kept awake at all hazards, best by striking the back, arms and legs with a towel and by walking the patient about. Use the galvanic battery. Give warm coffee. Permanganate of Potassium is an antidote, as is Atropine, hypodermically.

Class XIII. Other Poisons.

Under this heading are noted such such poisons as are not included in the other classifications and the nature of which it is generally necessary to be familiar with to make these articles on toxicology complete.

This class includes poisonous mushrooms, fish and serpents, Cantharides and venomous insects.

Poisonous mushrooms produce nausea, heat and pain in the stomach and bowels, vomiting and purging, and much thirst. Convulsions and faintings, with delirium, stupor and cold sweats are characteristics. Treatment consists in inducing vomiting with Tartar Emetic, followed by frequent doses of Epsom Salt, and large enemas of warm water to which some Alcohol or Brandy has been added. After the poison is expelled, moderate doses of Ether and Brandy may be administered.

Serpent Poison.

The bite from poisonous serpents produces a sharp pain at the wounded part, that soon extends over the limb or body. A great swelling appears, hard and pale, soon changing to a reddish and livid color. Fainting, vomiting and convulsions are always present, the breathing is difficult, cold sweats appear, the sight fails and the intellectual faculties are deranged.

Treatment consists in applying a cupping glass over the wound or a moderately tight ligament above the bite, allowing the wound to bleed after it has been well washed with warm water. The wound is then cauterized with actual cautery, lunar caustic, butter of antimony or other suitable means. It is then covered with lint dipped in equal parts of Olive Oil and Spirits of Ammonia.

Warm drink containing small doses of Ammonia is then given to cause perspiration and the patient kept well covered in bed.

Brandy or Whisky or Diluted Alcohol can generally be given in liberal quantities and a hypodermic injection of twenty minims of Aqua Ammonia, U. S. P. is highly recommended.

Insect Poison.

Cantharides and the potato fly (potato bug) produce a burning heat and inflammation in throat, stomach and abdomen, a most nauseous odor of the breath, an acrid taste, vomiting, copious bloody stools, hard pain in stomach and bladder and frightful convulsions. Treatment consists in exciting vomiting with warm water, administering Linseed enemas, and giving full

doses of Opium for pain. Inflammatory symptoms are treated on general principles.

The sting of poisonous insects such as the tarantula, wasp, bee, etc., generally produces but little pain, but Ammonia Water should be immediately applied and continued with until all pain has ceased. A few drops of this antidote should be given frequently in a little water, wine or brandy. The sting may be removed by strong pressure made around it with the barrel of a watch-key or similar instrument.

CHAPTER LV.

Three further trustworthy preparations with which to sample physicians are the following: Acetphenetid, U. S. P., Compound Syrup of Senna, N. F., and the Solution of Iron and Ammonium Acetate, U. S. P. (Basham's Mixture).

Liquor Ferri et Ammonii Acetatis, U. S. P.

Tincture of Ferric		
Chloride	40 Cc.	\$0.03
Diluted Acetic Acid	60 Cc.	.01
Solution of Am-		
monium Acetate.	500 Cc.	.05
Aromatic Elixir ...	120 Cc.	.04
Glycerin	120 Cc.	.07
Water, q. s. ad.	1000 Cc.	.00

1000 Cc. Cost \$0.20

Being a cost of less than 10c per pint, which compares very favorably with those exorbitant priced nostrums that claim to cure Bright's disease, etc.

The method of procedure is very simple. The solution of Ammonium Acetate (which should not be alkaline) is first prepared according to the U. S. P., and to it are then added successively, the Diluted Acetic Acid, the Tincture of Ferric Chloride, the Glycerin, the Aromatic Elixir and finally enough Water to make 1000 Cc.

Quality Important.

It is important that the Tincture of Ferric Chloride is of pharmacopoeial quality and at least three months old. Quality of the ingredients in this preparation is of prime importance, and especially of the Acetic Acid used. If

any doubt exists in regard to this Acid, do not use it, but prepare both the Acetic Acid, U. S. P., and Diluted Acetic Acid, U. S. P., from Glacial Acetic Acid, which is a very satisfactory, convenient and practical method. In testing Glacial Acetic Acid, if it is of pharmacopoeial purity, it will become a **crystalline solid** when exposed to a temperature of 50° F.

To make Acetic Acid, U. S. P. (36%), mix 9 oz. Glacial Acetic Acid with 16 oz. Water, both by weight.

To make Diluted Acetic Acid, U. S. P. (6%), mix 1 oz. Glacial Acetic Acid with 15½ oz. Water, both by weight.

Syrupus Sennae Compositus, N. F.

Fluidextract of Senna	135 Cc.	\$0.27
Fluidextract of Rhubarb	35 Cc.	.09
Fluidextract of Frangula	35 Cc.	.04
Oil of Gaultheria..	4 Cc.	.01
Alcohol	65 Cc.	.05
Syrup, q. s. ad.....	1000 Cc.	.08
<hr/>		
1000 Cc. Cost		\$0.54

Mix the Fluidextracts and add about 200 Cc. of the Syrup. To this add the Alcohol in which the Oil has previously been dissolved, stirring or shaking constantly, and finally enough Syrup to make 1000 Cc. Then mix the whole thoroughly by agitation. After standing a few days, this Syrup should be filtered through a well-wetted filter.

It is important that the deodorized Fluidextract of Senna of the U. S. P. be used in the above formula.

Made from the Drugs.

An elegant preparation, requiring no filtering, can be made by using the drugs, as follows:

Grind 35 Gm. each of Rhubarb and Frangula to a No. 40 powder and mix it with 135 Gm. of Deodorized Senna reduced to a No. 40 powder.

Then prepare a menstruum with 190 Cc. Alcohol and 410 Cc. Water and moisten the mixed drugs with 80 Cc. of this menstruum and after allowing the mixture to macerate an hour,

transfer it to a cylindrical glass percolator and pack moderately firm.

Now add enough menstruum to saturate the powder and leave a stratum above it and when the liquid begins to drop from the percolator, close the lower orifice and allow to macerate two days.

Then continue the percolation, adding first the remainder of the menstruum and subsequently a similar one (Alcohol 19 parts, Water 41 parts) until 600 Cc. of percolate are obtained. In this dissolve 617 Gm. of Sugar and then add the Oil of Gaultheria, mixing the whole thoroughly by agitation.

In mixing small amounts of volatile oils with large quantities of syrup, as in this case, it can be done quickly and thoroughly by half filling an eight ounce bottle with the syrup, adding the oil to this, shaking briskly and then adding it to the larger quantity of Syrup and again agitating thoroughly.

The deodorized Senna leaves, when not purchasable, can be prepared as directed under Fluidextract of Senna, U. S. P., page 211.

Acetphenetidin, U. S. P.

This drug is at present only made on a large scale, hence the pharmacist must purchase it from some reliable firm. It should however, be tested according to the tests given in the pharmacopoeia, all of which are simple and readily applied.

Accept no Acetphenetidin except such as is marked, "U. S. P.," and the label on the container of which also bears the manufacturer's name.

Acetphenetidin in original pound packages is quoted at 85c-95c per pound in large lots, but single pound lots are wholesaled at \$1.05 per pound.

Six 5-grain powders of Acetphenetidin, enclosed in an envelope and properly labeled will make a presentable package when sampling physicians.

In dispensing Acetphenetidin or similar crystalline substances, either in powder, capsule, cachet or liquid form, it should first be very finely powdered. This materially assists in the me-

dicinal action and when such insoluble substances are dispensed in liquid form, they remain in suspension more uniformly when the liquid is shaken and the medicine poured out. (An exception to this is Santonine, which when enclosed in capsules, is preferably dispensed in crystal form, however, with the physician's knowledge.)

CHAPTER LVI.

As the newer remedies come more and more in vogue and become better known and much used by the physician, some definite and uniform preparation of them should be made and brought to the physician's attention. In this manner such preparations as have merit readily find a place in succeeding revisions of the Pharmacopoeia and National Formulary.

Phenolphthalein.

This chemical, until recently only used as a delicate test for acids and alkalies, and as an indicator in volumetric analysis, has lately come much in vogue as a reliable, harmless cathartic, and especially so in habitual constipation.

Phenolphthalein occurs as a whitish or yellowish-white crystalline powder, almost insoluble in Water, but very soluble in Alcohol. The amorphous form, from which the crystalline is procured by means of heat, is to be preferred, as it is more readily soluble.

Phenolphthalein is prepared from Phenol, Phthalic Anhydride and Sulphuric Acid and has the formula $C_{20}H_{14}O_4$.

The pharmacist here has a brilliant opportunity to present several forms of this therapeutic agent to the physician.

Probably one of the most useful of these forms of administering it is in an Elixir, as follows:

Elixir Phenolphthalein.

Phenolphthaleingr. xcvi
Oil of Spearmint.....minims viii
Oil of Cinnamon.....minims x
Oil of Anise.....minims xii
Alcoholf℥ iv
Syrup, q. s. ad.....f℥ xvi

Add the Oils to the Alcohol and in this mixture dissolve the Phenolphthalein (amorphous preferred). Then gradually add the Syrup.

This Elixir contains 3 grains of Phenolphthalein to each tablespoonful (4 fluidrams), which is considered an adult dose.

The cost of this Elixir is approximately 13c per pint, Phenolphthalein being \$2.75 per lb., or 22c per oz.

Another form that can be offered the physician is the Syrup, which, however, contains the Phenolphthalein in suspension, and is preferably made fresh as wanted.

Syrup of Phenolphthalein.

Phenolphthaleingr. xcvi
Tincture of Vanilla.....f℥ iv
Syrup, q. s. ad.....f℥ xvi

Rub the Phenolphthalein with the Tincture of Vanilla and add the Syrup.

Another palatable form of the syrup can be prepared by using Chocolate Syrup, this Syrup to be made by mixing pure powdered Chocolate, 8 oz., with enough Syrup to make one gallon and boiling for at least 20 minutes.

Chocolate Syrup for any purpose should always be boiled for at least twenty minutes; this brings out the real flavor and largely prevents precipitation.

Compound Phenolphthalein Pills, or Capsules.

The following form may be massed with Syrup and formed into pills, or it may be dispensed dry in the form of capsules:

Phenolphthaleingr. xxv
Extract Cascara Sagrada.....gr. xv
Extract Nux Vomica.....gr. ii
Extract Belladonna Leaves....gr. i

Mix and make 25 doses.

Disguising Thymol.

Physicians often have trouble in disguising the taste of Thymol, especially in the south, where Thymol is now much used in the treatment of the hookworm disease.

Capsules and pills have proven inadequate, especially with children who,

as a rule, refuse to swallow them. One of the best methods is to dissolve one part of Thymol in three parts of Oil of Wintergreen and to give this on Powdered Sugar.

This is approximately a 25% solution, hence each 8 drops contain about 1 grain of Thymol (one minim equals about two drops).

Palatable Fixed Oils.

Castor Oil.—This Oil is often required aromatized and the following formula is one that answers the purpose excellently and at the same time produces a sweetened preparation:

Saccharin, pure	gr. vii
Vanillin, pure	gr. ii
Oil of Cinnamon, Ceylon....	gtt. x
Alcohol	f℥ v
Castor Oil, q. s. ad.....	f℥ xxxii

Dissolve the Vanillin and Saccharin in the Alcohol, add to Oil of Cinnamon and mix with the Castor Oil.

If no sweetened preparation is wanted, the Saccharin may be omitted. Oil of Anise, twenty drops to a quart of Castor Oil, is also often used and produces a palatable preparation.

Cod Liver Oil.—One of the most useful and practical methods for rendering Cod Liver Oil palatable is the simple admixture of 1% of Oil of Eucalyptus, this being about 2½ fluidrams to each quart.

The above process for Castor Oil is also good and a method much in vogue in Germany is as follows: Digest 100 fluid ounces of Cod Liver Oil with 5 oz. freshly roasted ground Coffee and 2½ oz. of Animal Charcoal at a temperature of about 140° F., for 15 minutes. This can be done in a gallon bottle, which should be kept corked. Macerate for three days more, with frequent agitation, and then filter.

This produces an almost colorless Oil, with the odor and taste of Coffee, and making a very palatable and acceptable preparation.

It seems that more attention should be given to the exploitation of some such form of Cod Liver Oil as in these three examples. What physicians want is Cod Liver Oil, not Wines or Elixirs

of it, or other preparations with queer and fancy names.

The nostrum maker has almost succeeded in making the physician believe that Cod Liver Oil is no earthly good for anything, and that only their modern preparation that "contains no Cod Liver Oil" should be used. All medical and scientific authorities agree "that the value of Cod Liver Oil is wholly that of a nutrient, it is the most easily digestible of fats and that the Oil itself is the best form to use," and they ought to know.

CHAPTER LVII.

The important subject begun in the previous chapter, namely, the making of definite, palatable and uniform preparations of the newer remedies or improved forms of old ones, is most important and timely.

For this reason pharmacists should publish the formulas of preparations that have proven their value and which have been prepared by them.

Profitable Work for Pharmacists.

The revision committee of the National Formulary is very anxious that the retail pharmacist shall speak upon this subject, in order that every possible advantage may be obtained for each succeeding edition of the N. F.

Every pharmacist should take a very keen interest in this revision, for the better a book the N. F. will be, the better a weapon it becomes with which to fight the nostrum—the money-stealer of the pharmacist.

The following is a list of articles that has been recommended for admission to the fourth edition:

Proposed N. F. Additions.

Elixirs.—Red Elixir, Salicylic Acid Compound, Sawpalmetto Compound, Cardamon Compound, Vanillin Compound, Hexamethylenamine.

Fluid Extracts.—Avena Sativa, Baptisia, Condurango, Chionanthus, Cocilana, Dioscorea, Drosera, Echinacea, Helonias, Nepeta, Senecio, Trifolium.

Pills.—Phenolphthalein Compound, Three Valerates (Iron, Quinine and Zinc).

Tablets. — (Under pharmaceutical titles), Calcium Sulphide, Coryza, Rhinitis, Seiler's.

Tinctures.—Ambrosia, Cactus, Passiflora, Pulsatilla, Larkspur.

Liquors.—Ammoniae Anisatus, Hydrastis (colorless), Glycerophosphatis Compound.

General Formulas for Hypodermic Solutions, Gauzes, Cottons, Eye Waters, Liquid and Solid Petrox preparations, Liquid Petrolatum preparations, Malt Extract Combinations.

Miscellaneous.—Cherry Laurel Water, Diastase, Glycerite Heroin Compound, Lecithin, Magma Bismuth, Pappayin (Caroid), Rennet, Syrup Ammonium Hypophosphite, Trypsin, Extract Cod Liver Oil and a Wine of this, Compound Spirits of Vanillin, Burrow's Solution, Fluidglycerates, Honey and Borax.

How Pharmacists Can Help.

Some of these proposed additions are in active demand in many pharmacies, and every possible data upon them is what the revision committee is after. Come forward with your formulas and information; be real pharmacists and real scientific men, and give to pharmacy whatever of value you are able to contribute.

This is the best form of "live and let live" policy. Your suggestions are valuable, no matter how insignificant they may appear to you, and they may be the means of solving important difficulties for your brother pharmacists in other sections of the country.

Do everything you possibly can to make this book complete and practical, and if all pharmacists would do likewise, the result will never be in doubt. The National Formulary must be the best formulary attainable, a powerful weapon in the pharmacists' hands with which to kill off the present monstrous nostrum traffic, the bane of our civilization, the robber of the pharmacist and the enemy of every true physician.

Examples of Changes.

Pharmacists who have frequent occasions to prepare any one particular N. F. preparation will doubtless be able to suggest modifications of work-

ing formulas, how best preserved, change in formula, etc.

One such for instance occurs in the Phosphatic Emulsion, on page 53. After the concentrated Emulsion is formed with Cod Liver Oil and Glycerite of Yolk of Egg, the strongly alcoholic Jamaica Rum is directed to be added, which is a very unpharmaceutical proceeding.

The entire amount of Orange Flower Water should be added to the emulsion first and then the alcoholic Rum, in which the Oil of Almond has been dissolved, and lastly the Dilute Phosphoric Acid. This will make the best possible preparation and one that is more stable than when made by any other method.

Bile Salts Preparations.

Bile Salts are becoming recognized therapeutic agents and physicians will doubtless welcome any efficient preparation of them that the pharmacist may bring to his notice.

Work of this nature should be pursued with vigor by the pharmacist, as it will greatly assist in securing more permanent results from any regular propaganda work that a pharmacist may undertake, and it stamps him as progressive and up-to-date and one to whom the physician will look for information, instead of having it brought to him by an emissary of the nostrum maker.

Bile Salts are a mixture of the Sodium Salts of the Cholic Acids, especially Glycocholic and Taurocholic Acids, occurring in the bile of man and of several animals, notably the ox. An experimental formula for a compound powder, one that will undoubtedly meet with the physician's approval, is as follows:

R—Sodium Taurocholategr. i
Sodium Glycocholategr. iv
Magnesii Oxidi Ponderosi.....gr. x
Sacchari Lactisgr. xv
M. ft. chartulæ No. X.

Sodium Taurocholate is marketed in 15 grain vials at 70c each, and Sodium Glycocholate at 75c per ounce.

Compound Elixir of Hexamethylenamine.

Hexamethylenamine 2 oz. av.
Lithium Citrate 1 oz. av.
Asparagus 2 oz. av.

Cinnamon	1 oz. av.
Sawpalmetto berries (Sabal).....	2 oz. av.
Sandalwood (Santalum olbum)...	2 oz. av.
Cardamon, hulled	¼ oz. av.
Sugar	8 oz. av.
Alcohol,	

Water, of each enough to make...32 fl. oz.

Grind the vegetable drugs to a No. 40 powder and mix them, then moisten with 3 fl. oz. of a menstruum of Diluted Alcohol and transfer to a glass percolator.

After macerating one hour, pack moderately firm and add enough Diluted Alcohol to saturate the powder and leave a stratum above it; allow this to macerate 24 hours and then continue the percolation slowly to 25 fl. oz.

In this percolate dissolve the Lithium Citrate, Hexamethylenamine and Sugar, by agitation. This makes an elegant and palatable Elixir, clear and permanent.

Quantities can be changed and changes in drugs made to suit the physician's need, but the general plan of the formula, its flavor, sweetness and alcoholic content is most excellent for the purpose for which it is intended.

CHAPTER LVIII.

The three preparations with which to sample physicians in December are Hexamethylenamina, U. S. P., Elixir Picis Compositum, N. F. and Syrupus Rhei et Potassii Compositus, N. F.

The propaganda movement, as fostered by the N. A. R. D. is making wonderful progress and all pharmacists should be strictly up to date in this educational campaign.

Elixir Picis Compositum, N. F.

Syrup of Wild Cherry	200 Cc.	\$0.07
Syrup of Tolu.....	200 Cc.	.05
Morphine Sulphate ..	0.35 Gm.	.04
Alcohol	50 Cc.	.04
Water	10 Cc.	.00
Wine of Tar, q. s. ad.	1000 Cc.	.70

Cost for 1000 Cc. = \$0.90

This preparation offers no difficulty in its manufacture. The Morphine Sulphate is dissolved in the Water, the Alcohol added to it and this mix-

ture is then added to the Syrups. Then a sufficient quantity of the Wine is added to make 1000 Cc.

Quality and elegance must ever be the watchword of the pharmacist in the manufacture of these official preparations. In the manufacture of the above Wine of Tar, the object of throwing away the first wash water is to remove the objectionable constituents of the Tar, as acetic acid, phenol, etc., and this must not be neglected, otherwise the preparation will have an objectionable odor and an irritant action on the mucous membranes of the throat, etc., and this is to be avoided in an expectorant preparation.

If at any time, the least cloudiness or precipitate appears in this Elixir, it should be filtered. In this connection it may be well to repeat the precaution that every preparation, in liquid form, should be perfectly clear, unless it contains therapeutically active ingredients in suspension.

Syrupus Rhei et Potassii Compositus, N. F.

Fluidextract of Rhu- barb	16 Cc.	\$0.05
Fluidextract of Hy- drastis	8 Cc.	.09
Potassium Carbonate.	16 Gm.	.01
Tincture of Cinnamon	64 Cc.	.06
Spirit of Peppermint.	8 Cc.	.02
Syrup	250 Cc.	.03
Diluted Alcohol, q. s.		
to make	1000 Cc.	.27

Cost of 1000 Cc. = \$0.53

Dissolve the Potassium Carbonate in the Syrup and add this solution, with constant agitation, to the Fluid-extracts, Tincture and Spirit, previously mixed with 500 Cc. of Diluted Alcohol. This is then well mixed and enough Diluted Alcohol added to make 1000 Cc. Filter in three or four days.

Made from the Drugs.

An alternative formula for preparing this preparation from the drugs and which yields an excellent preparation, is as follows:

Rhubarb	3 iv.
Hydrastis	3 ii
Cinnamon	gr. 192
Potassium Carbonate	3 iv
Spirit of Peppermint	3 ii
Sugar	3 vii
Glycerin	minims 72
Alcohol, Water, of each, to make	3 xxxii

Mix 16 fl. oz. of Alcohol with 13 fl. oz. of Water as a menstruum, this being the proportion of these ingredients in the Syrup. Reduce the vegetable drugs to a No. 50 powder and moisten with three drams of menstruum, containing the Glycerin. Percolate to 27 fl. oz. and in the percolate dissolve the Sugar, the Potassium Carbonate and the Spirit by agitation. Filter in three or four days.

Hexamethylenamina, U. S. P.

This drug as yet is generally purchased and should be tested when received. The pharmacopoeial tests on page 233, U. S. P., are simple and easily applied and if performed will give you many valuable talking points when sampling the physician. The price per pound is \$1.00.

Hexamethylenamine may be manufactured by the pharmacist according to the following process: 100 parts of a 40% solution of Formaldehyde (Liquor Formaldehydi, U. S.) are placed in a bottle or flask and well cooled. Then gradually and in successive small portions add 70 parts of Stronger Water of Ammonia (Aqua Ammoniae Fortior, U. S.), mixing well after each addition. Allow to stand two hours. At the expiration of this period an excess of Ammonia must be indicated by the odor; if no excess of Ammonia is indicated, more Stronger Water of Ammonia must be added until it is in excess and allowed to stand another two hours.

Now 10 additional parts of Stronger Ammonia Water are added and the solution is set aside tightly corked, for about 12 hours or over night. It is then poured in shallow vessels to crystallize. The vessels must be loosely covered with paper and placed in a warm place.

In a few days all of the Hexamethylenamine will have crystallized out. The crystals are then dissolved in hot Alcohol, some Animal Charcoal added, the solution filtered, again allowed to crystallize, the crystals washed with Ether and then dried in the air. The product represents pure, colorless crystals of Hexamethylenamine.

CHAPTER LIX.

Owing to the importance of the druggists' show globe colors, some space may profitably be devoted to the manner of making these preparations, emblematical of the pharmacist's art.

Nothing has the power to attract attention so impressively to a druggist's show windows as a clean show globe, filled with a beautiful and clear colored liquid.

For the benefit of any pharmacist who may wish to consider the subject, it may be said that a show globe containing anything but a perfectly clear and rich looking liquid, is worse than none, as a dirty or muddy looking show globe speaks volumes of disgust in the minds of possible patrons.

A Valuable Advertising Factor.

Here as in other things it is the small things that count most in the pharmacist's favor, the little things that people can see and judge. If these things meet with the public's favor and make a favorable impression, you may rest assured the public will have the same feeling (an unconscious one) that those things which it cannot see and understand about your business, must be all right also.

This is a truth that always works out in practice and seldom has it been known to fail. And as far as show globe colors are concerned, there is absolutely no need of any but those that look the richest and clearest, as they will if they are made right.

Process is Simple.

Making a show globe color is a very simple and a very inexpensive process, although several important details must be carefully attended to.

In the following formulas, unless otherwise indicated, proceed as fol-

lows: When the total amount of liquid has been made, store it in suitable vessels for at least a week. Gallon or half gallon bottles, enamelled pails or vessels of any kind or other container may be used, using only such, however, upon which the liquid can have no chemical or corrosive action.

This storing process is absolutely necessary, for no matter how careful you may manipulate, some precipitation is bound to occur. Chemicals used for show globe colors need not necessarily be chemically pure and when the ordinary kinds are used, some precipitation is always produced.

The greatest fault in using a freshly made color, however, is in the gradual precipitation of lime salts from the water used, upon the sides of the show globe, and thus while your liquid gradually becomes perfectly clear, the effect produced from the coated show globe is anything but pleasant.

Brilliance Is Necessary.

Therefore all settling and precipitation must be allowed to take place outside of the show globe and one week generally suffices. The liquid is then filtered into the perfectly clean globe and further difficulty is seldom experienced. If any further precipitation should occur, it should be filtered out.

For permanency and brilliancy, the inorganic salts are preferable to the organic or vegetable colors. In such cases where show globes are subjected to a freezing temperature, the addition of 15 per cent of Alcohol or Glycerin will prevent freezing and its possible consequence, breakage. Possible chemical changes however are to be guarded against in using Alcohol or Glycerin with such chemicals as Potassium Permanganate, etc.

It is not necessary to confine yourself strictly to the amount of Water employed, as the shade of a color may be deepened or made lighter by decreasing or increasing the Water content.

Deep Blue.

Copper Sulphate 1 oz. av.
Water 2 gals.
Ammonia Water, about..... 1 fl. oz.

Dissolve the Copper Sulphate in hot Water, or the powdered salt may be used, and add enough Ammonia Water until the precipitate first formed is redissolved.

Red (Crimson).

Solution of Ferric Chloride. 1½ fl. oz.
Ammonia Water 1 fl. oz.
Acetic Acid 2 fl. oz.
Alcohol 6 fl. oz.
Water 2 gals.

Add the Solution of Iron Chloride to the Water, then the Alcohol, next the Acetic Acid and finally the Ammonia Water.

Green.

The most beautiful green color is produced by making **Deep Blue** as above, and adding Dichromate of Potassium until the desired tint is obtained. This is best done by dissolving one ounce of Potassium Dichromate in a pint of hot Water and when cold use a sufficient quantity of this solution.

Orange.

The finest Orange color is a simple solution of Potassium Dichromate in Water, about 4 oz. to 2 gallons, and adding 1 oz. of Sulphuric Acid gradually to this solution.

Yellow.

What is undoubtedly one of the most brilliant refractive colors is a very weak solution of the above Orange, about one part to seven of Water, and representing about ½ oz. of the Dichromate to 2 gallons of color. If both the inside and outside of the show globe be polished with a moist mixture of Bicarbonate of Soda and Precipitated Chalk and then thoroughly rinsed, the appearance of the yellow color at night by reflected light is remarkably brilliant. So much so that it never fails to be commented upon by passers by.

These five are the most important and desirable shades, and as above stated may be made light or dark according to the amount of Water used.

The principal thing is to allow them to stand at least one week before filtering and to filter them into perfectly clean and clear globes. The results obtained are worth every effort made

towards brilliancy.

The advertising value of clear and brilliant show globe colors is beyond computation and hence no pharmacist should be satisfied with anything but the very best.

It helps you to link your name with cleanliness and quality in the eye of the public.

CHAPTER LX.

In response to an inquiry by the author for a reliable formula for the Solution of Peptonate of Iron with Manganese as a possible improvement upon the preparation official in the N. F., numerous responses have been received from prominent pharmacists.

The following one seems to be in most popular usage:

Peptonate Iron, Squibbs, 25%.....	9 Gms.
Soluble Citrate Manganese, Squibbs ..	8 Gms.
Aromatic Elixir	50 Cc.
Alcohol	150 Cc.
Distilled Water, ad.....	1000 Cc.

As it appears to be in such general use, and above all is giving universal satisfaction, it would seem that those pharmacists who have trouble in preparing this solution will give this process a trial.

Samuel L. Hilton, the popular Washington, D. C. druggist, states that this most excellent formula has been used by him for some time and that the preparation keeps in perfect condition with the ordinary changes of temperature and light to which it is subjected in a drug store.

Mr. Hilton adds the precaution that if the solution of Ferric Peptonate develops any unpleasant odor the addition of a few drops of Ammonia Water will remove it.

Another Formula.

J. Pinkinson, of Newark, N. J., has found the following to yield a satisfactory preparation:

Iron Peptonate with Manganese, scales (Squibb)	gr. 120
Aromatic Elixir	fl. dr. 6¼
Alcohol	fl. oz. 2¾
Water, q. s. to make.....	fl. oz. 16

Dissolve the scale salt in eight ounces of Water, add the Elixir, then under constant stirring the Alcohol, mixed with 4½ ounces of Water. Then add enough Water to make one pint and filter..

Another formula is that sent in by G. H. Averitt, of Terre Haute, Ind., and commended for its simplicity of preparation, palatability and splendid therapeutic results. It is as follows:

Iron and Manganese Peptonate, soluble, Squibb	768 grains
Alcohol	4 fl. oz.
Aromatic Elixir	2 fl. oz.
Syrup	3 fl. oz.
Compound Tincture of Carda- mom	6 fl. dr.
Distilled Water, to make. . .	32 fl. oz.

Dissolve the salt in the Water, add the other ingredients previously mixed, set aside a few days and filter.

A Fourth Formula.

Still another formula, said to yield a perfectly satisfactory preparation, is sent in by a Providence, R. I., pharmacist. Make three solutions, as follows:

(1) Citric Acid	40.0
Water	800.0
Stronger Ammonia Water, enough to neutralize.	
(2) Peptonate of Iron.....	15.0
Water, boiling	450.0
Dissolve.	
(3) Manganese Chloride	10.0
Water	450.0
Dissolve.	

Mix these three solutions, and add successively:

Glycerin	200.0
Brandy	1000.0
Soluble Extract Sweet Orange Peel	60.0
Solution of Saccharin.....	4.0
Aromatic Elixir	250.0
Water, to make.....	4000.0

These four formulas, in addition to the Harrison formula, previously published (Chapter XIV), and the official

formula as at present constituted, will doubtless be the means of furnishing the N. F. Revision Committee with material to produce an exceptionally fine formula for this preparation for the new National Formulary.

Other Formulas.

J. C. Gillman, Chicago, has this valuable suggestion to make regarding the Liquid Petrox of the N. F.: "I have tried Oleic Acid from several manufacturers and always obtained a poor preparation; after consulting the Pharmacopoeia on Oleic Acid, I did as there directed and by cooling a pound of an Acid, marked U. S. P., c. p., I obtained about fourteen ounces of perfectly clear liquid, the balance being sediment. Using this clear liquid in the N. F. formula, I obtained an excellent preparation."

Petrox Combinations.

Another correspondent has obtained most excellent results from the following combinations of Liquid Petrox, the quantities being by weight:

Liquid Petrox with 20% Camphor.
Liquid Petrox with 2 to 5% Phenol.
Liquid Petrox with 20% Creosote.
Liquid Petrox with 5 to 15% Menthol.
Liquid Petrox with 20% Methyl Salicylate.

Liquid Petrox with 5 to 10% Ichthyol.
Liquid Petrox with 5 to 10% Iodine.
Liquid Petrox with 20% Guaiacol.

A valuable addition to the N. F. is also recommended, namely an ointment of the nature of an analgesic or anodyne balm, composed of 5% Menthol, 5% Methyl Salicylate and 90% Hydrous Wool Fat, (or the Wool Fat could be replaced by Solid Petrox).

Compound Tincture of Larkspur.

A tincture of Larkspur is extensively used, and a very good preparation is made by C. E. King, of Philadelphia, as follows:

Larkspur Seed, ground	.....8 oz.
Green Soap	.....2 oz.
Potassium Carbonate	.....1 oz.
Oil Lavender Flowers	.....1 dram.
Alcohol	.....24 fl. oz.
Water	.....8 fl. oz.

Macerate for ten days with occasional agitation and filter, adding enough of a mixture of Alcohol 3 parts and Water 1 part, to make 32 fl. oz., or the tincture can be prepared by percolation after the above mixture has macerated for a few days.

Syrup of Ammonium Hypophosphite.

A formula for this Syrup will probably be included in the next revision of the N. F., and the following has proven eminently satisfactory in every way with J. Alexander, of Boston:

Ammonium Hypophosphite	...gr. 256
Water, Distilled	.....fl. oz. 2
Glycerin	.....fl. oz. 4
Syrup, to make	.....fl. oz. 16

Let the good work go on. When pharmacists will allow their favorite formulas to be thus published, the proper scientific spirit is shown and the "live and let live" spirit is manifested in a high degree.

Should these formulas, or similar ones, or modifications of them, be included in the next or succeeding editions of the U. S. P. or N. F., it may be the means of materially assisting thousands of pharmacists and physicians in their fight on the nostrum evil.

CHAPTER LXI.

One of the handiest vessel about the pharmacy is a casserole. The enameled kind, with a solidly-attached handle and a well-fitting enameled cover is the best kind to have. When once its usefulness is learned, probably every pharmacist will have a set of four, with a capacity of one quart, one-half gallon, one and two gallons, respectively. The price of such a set averages about \$4.00 to \$4.50.

Value of the Casserole.

First, such a casserole is just the thing for making infusions and decoctions. A stiff piece of wire laid across the top of one of these vessels serves the useful purpose of holding a bag, by means of a string, in which are placed the crushed leaves, herbs, roots, or other parts of vegetable drugs for making the infusion.

The making of syrups with the aid of heat is best accomplished in a casserole, and makes the handling of the hot syrup safe and easy. It is easily and quickly cleaned, there is no danger of breakage, and it is a great labor-saver in many ways.

In making ointments and cerates that require heat, the casserole is invaluable. When such preparations are for immediate use, the casserole containing them can be placed in a larger vessel containing cold water, the ointment stirred and the congealing point is quickly reached.

A most useful service is rendered with this vessel in the process of percolation. The drugs used in the preparation of tinctures, fluid extracts, etc., are always first macerated, and by doing this in a well covered casserole evaporation is reduced to a minimum.

As a quick means of heating small quantities of water, for making such solutions as the Compound Solution of Cresol, U. S. P., these casseroles are just the thing, and numerous other uses can be found for them in the daily work of the druggist in his laboratory.

A Handy Vessel.

Another very handy vessel is a graduated bottle, of a size convenient for the amount of preparations usually made, or several sizes can be made, as quart, half gallon and gallon.

To make such a one, thoroughly clean a clear glass bottle and dry perfectly on the outside. Then with a good mucilage or label paste attach a strip of white paper from the base of the bottle to the neck, the width of this strip being about one and one-half inches and tapering somewhat near the neck, to prevent creasing.

Then place this bottle upon a level surface and pour into it 2, 4 or 8 ounces of water, according to how you wish to graduate the bottle, and make a small mark upon the paper with a lead pencil at the height of the water. Then keep on adding water, marking each addition upon the paper at the exact height, until the bottle is filled. All these markings should be made on

one side of the paper, the other side being reserved for cubic centimeter (Cc.) markings.

The bottle is then emptied of its contents and the markings and figures remade with pen and ink. When thoroughly dry, the paper is twice coated with Collodion or a good label varnish that is impervious to moisture. Such a bottle is a great time and labor saver.

Here then we have two vessels of comparatively small cost that are a great factor in making good preparations, in saving time and labor, and in reducing expenses. Now if pharmacists will see to it that all drugs used in their preparations are of prime quality and that they have good apparatus to make the preparations from them, they have all the means necessary to practice their art.

The Money-Saving Laboratory.

The money to be saved in making your own preparations amounts to a vast sum in the course of an ordinary business career. It means success or failure, according to which method you pursue. Druggists who make their own preparations generally own their own store building, their own home and have money in the bank, when their business is ten, fifteen or twenty years old.

Those who buy their preparations from the wholesaler and the manufacturer, instead of making them, are generally still paying rent at the end of thirty years, and are, at the end of such a time, approximately at the same financial point in their careers as they were when they began business, if they had capital enough to start free of debt. There doubtless are a few exceptions to this rule among the 45,000 retail druggists of the United States, but the general rule here stated holds good.

The trouble seems to be that we only look at the few extra cents we must pay for this or that preparation, and this bears out the old saying, "penny wise and pound foolish."

A Lesson in Finance.

For instance, let us take a few examples: Solution of Subacetate of Lead costs 20c per pound, bottle included; the pharmacist can make it for 7c per pound.

Essence of Pepsin costs from 49c to \$1.13 per pint when purchased, the pharmacist can make it for 33c per pint.

Alkaline Antiseptic costs ready made from 39c to 75c per pint, while the pharmacist can make it for 12c per pint.

Elixir of Glycerophosphates is variously quoted at from 60c to 94c per pint, and the pharmacist can make it for 22c per pint.

And so on with almost every pharmaceutical preparation.

The average condition throughout the country would indicate that every time a pharmacist spends 37 cents in making a preparation, he pays the manufacturer or the wholesaler \$1.00 for it. These figures are based upon the fact that the pharmacist uses nothing but absolutely pure materials.

Look over your last twelve months' invoices and copy the items that you could have made yourself. Supposing the amount is only \$500. Had you made these items yourself the expense would have been 37 per cent of \$500, or \$185, a gain of \$315 for one year. You expect to be in business for the next twenty years surely, hence if you will make your own preparations, you can look forward to a clear gain of \$6,300. Isn't it worth while?

CHAPTER LXII.

One of the most valuable labor saving devices in the laboratory is an index. That is, an alphabetically arranged list of everything that you have in the line of medicine. This feature is so important and such a system-producer that it could be applied equally as well to the entire contents of your store.

Such an index can be appreciated alike by the proprietor, old or new clerk and apprentice, and will prove a

revelation and a "joy forever," for you will find (especially if the store has been doing business for a number of years) that you have many things in duplicate or triplicate.

A Money Saver.

An index, therefore, is a money-saver. Not only does it save money by acting as a check upon purchases, but to a much greater degree does it save money when a new clerk is employed and left in charge of the pharmacy; at such a time an index shows its real worth.

Every pharmacist has doubtless often been placed in an unenviable position, when new in a store and alone, by having calls for things not readily located. They are there, or they should be on hand, but they cannot be found. The customer is waiting and while you continue to look, another customer comes in (strange how these things happen) and still you seek and find not.

Soon that "temper-losing" feeling comes over you, you wonder why things are not where they ought to be, or where they can be found.

These things should not happen, because they are breeders of discourtesy, and a losing proposition for the store wherein they occur. Put your store beyond such happenings by indexing it. The process here given is simple and almost any pharmacist can improve upon it, according to local conditions.

Indexing the Store.

Start at any convenient place in the store-room or laboratory and divide your entire stock into sections. For instance, the tincture shelving is divided into section "A," "B," "C," "D," etc., according to the number of sections in it. The proprietary medicine shelving is likewise marked "E," "F," "G," etc. The prescription case is section "H," then the various sections in the laboratory are marked "I," "K," etc. Show cases can be similarly marked, as well as the basement, stairway, or any other place where anything may be stored.

Should there be more sections than

there are letters in the alphabet, begin after "Z" by doubling up, calling the next one "A A," etc. Never call any section "X," however, for fear of confusing this with the double X, (XX), which always means a closet or drawer.

The section markings must be made where they can readily be seen, but they must not disfigure the furniture. Ornamental letters are used in many pharmacies.

When every section has been lettered, take a convenient sized tablet, mark it "Section A," and write down the name of every article in that section. Should some articles be called for by various names it would be a good idea to write them all down on the tablet.

This Feature is Valuable.

This plan becomes of value when a preparation is called for by a German or an English name, and some new clerk may be unfamiliar with its Latin equivalent. Use only one line for each name, as this will make copying or the indexing proper, a much easier task. The shelves in each section are numbered 1, 2, 3, 4, etc., and if there are closets or drawers in the section, mark them with a double X (XX).

When you have the entire contents of section A on paper, its appearance will be somewhat as follows:

Aconite Tr.	A 1
Cinnamon Tr.	A 2
Muttertropfen (Tr. Cinnamon).....	A 2
Opium Tr.	A 3
Rhubarb Syrup	A 4
Ammonium Carbonate	A 5
Hirschhorn Salz (Ammon. Carb.)....	A 5
Blacking, shoe	A xx1
Shoe Blacking	A xx1
Bird seed	A xx2
St. Germain tea.....	A xx3
Abführungs Thee (St. Germ. tea)....	A xx3
Species Laxantes, N. F.....	A xx3
Rose Toilet Soap.....	A xx4
Toothpicks, 5c packages.....	A xx4
Nipples, extra stock.....	A xx4

Now if one were looking for Tincture of Aconite, it would be found in section "A," shelf 1, being the top shelf. Shoe Blacking would be found in section "A" in the closet on the first shelf, and the extra stock of 5c Toothpicks will be found in the same section on the fourth shelf of the closet. St. Germain tea is

also in section "A," in the third row of drawers, etc.

Further Details.

On your prescription case, section "H," 3, you may have a small bottle of Tincture of Aconite for handiness in dispensing. You may even have a large stock bottle of Tincture of Aconite in section "M," 2, in the laboratory. These would appear on your section sheets under "H" and "M."

When this part of the task is finished and every article has been written on the sheets of paper, headed "A," "B," "C," etc., get a well bound blank book, large enough to contain all the names and which is indexed. Then from your original section sheets, copy all names beginning with A, into the bound book and at the same time crossing out the name on the original sheet. As the names in the finished index should appear in strict alphabetical order, it is probably best to first copy all the A's, B's, C's, etc., on separate sheets or in an inexpensive blank book, in the order in which they appear on the original sheets. Then the transferring of them to the finished index book in alphabetical order will be a much easier task, and can be done during leisure hours.

Systematizing.

Whenever possible, group all preparations by the drug name, not as tinctures, fluidextracts, syrups, etc. This will bring all the preparations of a certain drug together in the index and is by far the handiest arrangement.

A part of your finished index will appear thus:

Aconite, extract, powd.....	F 2
Aconite, fluid extract.....	S 1
Aconite, tincture.....	A 1, H 3, M 2
Aconite leaves	D xx4
Aconite root, ground.....	D 5
Aconitine	H 1
Aconitine granules	R 7
Cascara Sagrada bark.....	C xx3
Cascara Sagrada, fluid extract.....	I 2
Cascara Sagrada, arom. flex.....	M 5 I 3
Cascara Sagrada extract powd.....	H 4
Cascara Sagrada ext., pills, 3 gr.....	W 14
Cascara Sagrada ext., tablets, 5 gr.....	T 4
Jones' Cough Syrup.....	E 3
Jenkin's Headache Cure.....	F 5
Johnson's Bitters	G 1
Josua's Tonic	F 1
Nipples	A xx4, K 1
Night Lights.....	K 1

Such an index tells you at a glance where everything in your store is, it will locate anything in the store quickly, and it also tells at once whether you have any particular item called for. A few lines should be left at the bottom of each page to allow for new goods.

CHAPTER LXIII.

Druggists are fast becoming acquainted with the fact that intelligent propaganda work and the sampling of physicians is one of their best assets in a business sense. Until recently the idea seemed to be predominant that he should only advertise drug sundries and similar drug store merchandise and under no condition should he advertise either his professional qualifications or his medicinal preparations.

Do Not Neglect Sampling.

Happily this propaganda work of the N. A. R. D. is changing this situation and the druggist realizes as he never did before that it pays handsomely to advertise the products of his skill. No druggist should ever neglect to sample his physicians with his own made official preparations, for in doing so he lays the foundation of a very profitable business, more profitable than any other department in his pharmacy.

This is advertising intelligently, and much the same means are available in doing so, as are employed in advertising any other article or department of your store.

When you advertise your Compound Syrup of Squill to the physicians and sample them with it, you proceed exactly as you would when attempting to sell a customer your hair tonic or a hair brush—you set forth its intrinsic value in such a manner as will make a sale in the one case and a prescriber of it in the other. This is good business.

January Sampling Work.

The three preparations with which you will sample your physicians this month are Diluted Hydrochloric Acid, U. S. P., Compound Syrup of Squill,

U. S. P., and the Elixir of Sodium Salicylate, N. F.

Be sure that your drugs are exactly right and of the very best quality, use the utmost care in being accurate and careful in manipulation, and see that all three preparations are perfectly clear.

Acidum Hydrochloricum Dilutum, U. S. P.

Hydrochloric Acid	..100 Gm.	\$0.03
Distilled Water	...219 Gm.	.01
		<hr/>
		319 Gm. cost \$0.04

Mix the Acid with the Water and preserve in a glass-stoppered bottle. The Water should be weighed into the bottle and to this the Acid, also by weight, is added. Hydrochloric Acid should be of full U. S. P. strength and quality. In ordering specify "chemically pure."

The specific gravity of this Acid is about 1.158 and hence an alternative formula may be used in the above, as follows:

Hydrochloric Acid	.....30 Cc.
Distilled Water	.....76 Cc.

Mixing by weight is always to be preferred however.

Elixir Sodii Salicylatis, N. F.

		Cost
Sodium Salicylate	.....85 Gm.	\$0.08
Aromatic Elixir, to		
make	.....1,000 Cc.	.25
		<hr/>
		1,000 Cc. \$0.33

Dissolve by agitation.

This is a cost of about 16c a pint or \$1.28 a gallon. It is a simple solution and a reference to the price lists of various manufacturers reveals the information that net prices on this Elixir run from \$2.75 to \$3.75 per gallon. This would seem to indicate that those pharmacists and dispensing doctors who patronize these houses with orders for such simple preparations, are paying a fine price for the privilege.

As this Elixir is quickly and easily prepared and liable to become dissolved, it should always be made fresh when required for use. Pharmacists should give more attention to the quality of Sodium Salicylate than has been the case in the past. Much of this salt as it appears on the market is really unfit for use and orders should always specify "U. S. P. quality." It should be preserved in a cool place, in well-stopped bottles, and protected from the light.

The Pharmacopoeia distinctly states in regard to color that it shall be in "white microcrystalline powder, or scales, or an amorphous, colorless powder, or not having more than a faint pink tinge." Therefore the careful pharmacist will reject any other kind offered him and especially such as have a distinct brownish color.

Preference should always be given to such Sodium Salicylate as is prepared from the Salicylic Acid obtained from Oil of Wintergreen. The much cheaper product, made from the synthetic Salicylic Acid, is frequently contaminated with poisonous by-products.

Syrupus Scillae Compositus, U. S. P.

	Cost
Fluidextract of Squill....80 Cc.	\$0.08
Fluidextract of Senega..80 Cc.	.15
Antimony and Potassium Tartrate	2 Gm. .01
Purified Talc	20 Gm. .01
Sugar	750 Gm. .09
Water, to make	1,000 Cc. .00
	<hr/>
	1,000Cc. \$0.34

being about 16c a pint, as against 29c to 55c per pint for the purchased product.

Some pharmacists have experienced much trouble with this syrup. Often it ferments and again it becomes cloudy, and for apparently no reason whatever, being clear when first prepared.

When the operation has been properly performed, the fault always lies with the fluidextracts. It will be noted that the fluidextracts, as required by the Pharmacopoeia and those furnished

by some manufacturers, are not at all similar. Therefore no fluidextract should be accepted that is not marked "U. S. P., 8th Revision" or "U. S. P., 1900."

The Fluidextract of Squill is preferably made by the pharmacist, himself. The process is very simple and no evaporation is necessary, being simply maceration and percolation to the required amount (see U. S. P., page 208).

The Fluidextract of Senega can also be profitably made by the pharmacist, as the price charged for it by some manufacturers is out of all proportion to the cost. An average net price is \$2.75 per pound, while the pharmacist can prepare it for less than one-third of this amount.

The Process.

The two fluidextracts are mixed and poured into an evaporating dish, which has previously been weighed and the weight noted. They are then evaporated on a water-bath to 100 grammes (3 oz. av., 231 grains). Mix this residue with 300 Cc. of Water, and, when cold, thoroughly incorporate with it the Purified Talc, and filter.

The filter must be carefully made and well wetted with Water, otherwise the process is a slow and tedious one. The filtrate should be perfectly clear. Enough Water is passed through the filter to obtain 400 Cc. of filtrate. To this is then added the Antimony and Potassium Tartrate dissolved in 25 Cc. of hot Water.

In this liquid dissolve the Sugar, heating to affect solution if necessary, strain, add enough Water through the strainer, to make the product measure 1,000 Cc. and mix thoroughly.

Comment on Formula.

There seems to be no good reason why the fluidextracts should be evaporated. It is true that some of the pectin may be precipitated by the heat and all the Alcohol is driven off. The Alcohol is only present in very small quantity, less than 4 per cent, while many Syrups of the Pharmacopoeia that are used in expectorant mixtures contain more (Tolu, Senega, Tar, etc.).

An excellent preparation, fine in appearance and permanent, and withal, very active therapeutically, is made as follows: Add the fluidextracts separately to 200 Gm. of Sugar contained in a large mortar, add the Purified Talc, mix thoroughly, and then add gradually, with constant trituration, 300 Cc. of Water, and continue the trituration until the Sugar is dissolved.

Filter this, adding Water through the filter to make 715 Cc., being careful that the filtrate is perfectly clear, add to it the solution of Tartar Emetic, and finally the balance of the Sugar.

If the balance of the Sugar is dissolved in a bottle just large enough to contain the finished amount of Syrup, the Sugar will readily dissolve by alternately inverting the bottle and setting it upright.

CHAPTER LXIV.

An Improvement.

A modification of the index system in Chapter LXII is made by Mr. Farrier, of New York, as follows:

"Having filled out the sheets of paper and copied them into a bound book, even if you do leave blank lines or pages for new items, you will sooner or later strike the snag of immobility in the separate items.

For example, your index will read:

Aconite,
Aconitine,
Adrenalin,
Agrimony,
Aloes,
Aloin,
Alum,

and so on, all very perfectly arranged and all lines filled. Along come Aberle's Tonic, Ahearn's Pills, Allspice, etc., all clamoring for admittance to their proper place, but there being no spare room they are either added to the tail end of "A," or perhaps, even worse, a new page is devoted to letter "A" after "Z" and the confusion has begun.

The Card Index System.

"The remedy is in the Card Index system. On one card headed Aconite (shown in the illustration) you can have all the Aconite preparations with their location; if one card is filled, add

another directly behind it. Should continued changes in the location, erasures or anything else spoil the appearance of the card, a new one is easily made.

Aconite

- Leaves Powd.	DS	11 50
" Root "	DS	11 50
" Powd. Extract		RC
- Solid Extract	DS	B 3
" Finest Leaf		O 3
" " Root		O 4
" Fluidextract Leaf	FX	
" " Root	FX	
" Plaster	WC	9
	-over-	

"Any new articles even if they should come in one week or five years after the index is full, are simply written on new cards and put in their alphabetical place by simply moving the cards apart.

"Should you fill up one cabinet, procure another and let the first contain all the cards from "A" to "M," the other all those from "N" to "Z"; or you can have one cabinet for pills and tablets, one for proprietaries, one for drugs and chemicals, and so on.

"There is an objection to loose cards that some one may upset the whole cabinet and mix them up, but this can be avoided by having the kind in which a rod runs through the cards, making them movable, yet only removable at will.

"The cabinets may be wedged under a desk or counter, thus preventing them from falling out, the drawer being so arranged that it cannot be detached from its sheathing. The kind I use can be bought with 1,000 index cards to fit from almost any large stationer for less than \$3.00 each. The back of the card, shown in the illustration, may contain any information you may wish your clerks to know, be it price, cautions, dates, hints, etc., all of which would be too cumbersome for a bound book.

Two Systems in One.

"The many other admirable points in the previous article can easily be dovetailed into the card system and the peculiarities of any store readily arranged for.

"I would suggest that the Acids be not indexed under Acid, but as Citric, Oleic, Tartaric, etc.; botanical drugs not under the name of the part of the plant used, but with the name of the drug itself, as for instance: Orange, not peel; Saffron, not flower; White Oak, not bark, or Oak, white, bark. Proprietaries are placed under their popular name, thus: Vaseline, not Cheeseborough; Malted Milk, not Horlick, although I should have nearly all under the proprietor's name also, cross indexed, for convenience in grouping, as we often forget whether a preparation is a Restorer, Rejuvenator or Regenerator."

A Money Saver.

As stated in the previous article, a correct store index is one of the most valuable assets a pharmacy can possess. It saves many a dollar in quickly locating an article, whether a new clerk is looking for it, or whether the proprietor is looking for something seldom called for and the location of which has escaped his memory.

The indirect benefit to the business is still greater, for a bad impression is always created in a customer's mind if he has to wait a long time while the article desired is being looked for.

CHAPTER LXV.

In these days of "elegant pharmacy," when so much stress is laid upon the value of elegance in pharmaceutical preparations, therapeutics often become a matter of secondary importance.

Of course, a preparation should be as elegant as possible, it should look nice, it should be palatable, it should possess an agreeable odor, **if it can possibly be made so**, but the preparation should represent the full therapeutic activity of any drug or chemical that it contains or is supposed to contain, as a first consideration.

Elegance Exposed.

And this is where elegant pharmacy, as the term is used by many nostrum manufacturers, is lamentably weak. Such preparations are very weak in therapeutic efficiency, or else the "ele-

gant" preparation contains hidden or powerful drugs for the purpose of creating a favorable impression with the physician, to show that "the stuff works."

Many and many an elegant pharmaceutical is nothing but a palatable preparation of Opium, Chloral, Bromides, Cocaine, Strychnine, or other powerful drug. Many of these naturally are now exposed through the effectiveness of the Pure Food and Drugs Act, but many cannot as yet be reached by this agency.

There is, however, one special way in which pharmacists can become active as regards "elegant pharmacy" which has for its basic principle—the first condition—the conservation of the full therapeutic activity of the drug.

The Cachet.

We have reference to the cachet (pronounced kash-ay'; from the French). For of all the forms in which drugs may be administered in the dry form, the **cachet** is undoubtedly the most practical as regards ease of manufacture by the pharmacist, convenience in taking, elegance in appearance, and solubility, to say nothing of the inexpensiveness of material and time consumed in making.

The reasons then why it would be to the pharmacist's advantage to acquaint his physician with this efficient aid to drug administration are these:

Reasons for the Cachet.

It would, in a large measure, do away with the necessity of keeping on hand so many varieties and makes of coated pills; it would furnish a ready means of administering drugs to children, who many times cannot or will not take a pill or capsule or bad-tasting liquids. Even Castor Oil can be administered in cachet form.

Other Reasons.

Almost any dry medicine can be dispensed in cachet form quickly. The convenience, as far as the patient is concerned, is unsurpassed. That they are elegant and soluble no one will dispute. A powder is always troublesome to the patient. Capsules, as a rule, involve considerable time in man-

ufacture. The superiority of the cachet over the compressed tablet any physician can see. As a rule, the physician must depend upon a ready-made tablet, prepared from a fixed formula. In short, a cachet has almost everything in its favor.

Advantages of the Cachet.

While the history of the cachet is interesting, this is not of importance now. Suffice it to say they are lenticular shaped wafer shells, made in various sizes, from wafer sheets, with which all pharmacists are familiar.

Cachets may be purchased in boxes containing 1,000 of each size and three sizes are generally all that are required. 1,000 cachets per box means 1,000 halves which, when dispensed, yield 500 complete cachets. The average price is about 90c per 1,000 halves, and the capacity is approximately as follows, based on Quinine contents:

No. 0, 4 gr.; No. 1, 7 gr.; No. 2, 9 gr.; No. 3, 12 gr.

The cachet can be filled without the aid of any apparatus, by simply laying the required number on a clean piece of paper, depositing the powder in it, and placing another, the edge of which has been slightly moistened, on top of it, edge to edge, and then firmly pressing the margin together. That is all there is to it.

In practice, however, it may be convenient to use a method as follows: Procure two wide mouthed bottles (empty morphine bottles answer nicely) and on one place the cachet, put in the powder and with the aid of a small camel's hair brush, slightly wet the margin all the way around, cover with another cachet and use the second bottle for pressing the two halves together.

Do not use too much water in moistening, as but a very small amount is necessary to cause the margins to adhere. Too much moisture causes the parts to become unduly soft, they shrivel up and spoil the appearance.

How to Administer.

The method of administration, with which the pharmacist should acquaint his customer, consists of placing the cachet in a spoon containing some water and swallowing both water and cachet at one operation.

A more practical and expedient way, which will probably be preferred by many, consists in simply holding the cachet between the thumb and forefinger, dipping it into water and immediately swallowing it.

As these cachets are perfectly tasteless, they will undoubtedly meet with general approval by both physician and public; with the physician especially, as with this agent, he is able to prescribe many drugs in powder form, which previously he was not able to do.

There are also cachet machines in the market, for holding and sealing them, costing from \$5 to \$10 each.

A Home-Made Apparatus.

A home-made apparatus is readily made as follows: Procure a smooth piece of board, hardwood preferred, about 1 inch thick, from 8 to 12 inches wide, and from 15 to 20 inches long. Then bore holes in this board to fit the various sized cachets, about 15 each, of the three sizes. The sharp edges of the board, where the holes have been bored, should be smoothed off and rounded, to prevent breaking of the cachets and to facilitate their removal.

The moistening and pressing can then be accomplished, as above indicated, with a moistened camel's hair brush and an empty morphine bottle.

Pharmacists by all means should procure a supply of these cachets, and sample their physician with some containing Castor Oil, Quinine, Aloes, Capsicum or some mixtures ordinarily prescribed in pill and capsule form but which for various reasons are better given in cachet form. It will stimulate the writing of prescriptions in more ways than one.

The U. S. P. and N. F. Propaganda.

The Theory and Practice of Getting Back to First Principles in Medicine.

CHAPTER I.

"A thing well begun is half done" is a very trite old saying, and literally true, if practically applied. The true beginning to the harvesting of the juicy fruits of propaganda work is to supply yourself with the Eighth Revision of the U. S. P. and the Third Edition of the National Formulary.

When we go to war, we first supply ourselves with weapons. Now, brother druggists, here is a chance to assert yourselves, to take your place among men where you rightfully belong, to change the entire nature of the prescription, to put money in your pocket.

The Beginning, or First Step.

To make a beginning, look over your prescription file and note the proprietaries mostly prescribed; then with the aid of your books, seek out and make the standard preparations that the physician is really trying, or ought to be trying, to prescribe, but cannot succeed, for lack of knowledge in this respect, as will be explained later on. He needs your assistance for this work.

It is necessary for you to impart this knowledge to him by the best means in your power. Right now, for the first time in our history, are we able to approach physicians on this subject. They are hungry for it!

Persevere in the Good Work.

You will doubtless stumble and run against snags in doing this (every child does when it learns to walk), but your perseverance must never leave you—

remember you are aiming at a definite object and must never cry "quit."

As a druggist, you must realize, once and for all time, that the natural and only relation that should exist between you and the physicians with whom you may come in contact, should be one of confidence and harmony.

The Right Sort of Rivalry.

There should be no rivalry between the professions of medicine and pharmacy except that of doing good deeds, one for the other and both for the public.

This is an ideal relationship, and as it is you who are seeking the change for the better, as it is you who are trying to impart valuable knowledge to your physicians (that both may profit by it), and as it is you who are trying to implant the seed of confidence in the physician's breast, it is, therefore, you who should take the first step, and also the second step, to bring about this much to be desired end.

We seek in this to do deeds that are worth accomplishing, not alone for our present needs (call them selfish if you will), but just as much and more for future generations—for your own son who will be a druggist, or for your friend's son, who will some day be a druggist.

Let's Quit Our Bickerings.

These everlasting bickerings of the physician dispensing and the druggist counter-prescribing, the physician prescribing specialties, the druggist substituting, the physician's learning all for naught on account of the

druggist's incompetency, and vice versa, and all the rest of those mischief-making phrases, are the outcome of pure and unadulterated selfishness, a diseased mind and a lack of genuine manhood; hard terms these, but who dare deny them?

It is of the greatest importance to go and see your physician; it is imperative that you see those you are not very well acquainted with and get acquainted with them. Propaganda is a plant of slow growth and requires careful attention.

Visiting by Letter.

If you are alone in your store, without a clerk to leave in charge, you will need to do all of your visiting by letter, each one of which must always include a kind invitation to call on you. Otherwise make most of your first few calls in person.

Supposing Hypophosphites are prescribed rather frequently, with various manufacturers' names attached. Take a four or an eight ounce sample and call upon your best physician friend and fight out your first battle with him.

Tell Your Physician All About It.

Tell him you have succeeded in preparing a fine Compound Syrup of the Hypophosphites, strictly according to the U. S. P., show it to him, tell him how simply it is made and what it contains.

Tell him that no matter what claims Jones and Smith may make for theirs in regard to purity, scientific methods of manufacture, the latest approved machinery, etc., it cannot possibly be better than yours.

Tell him that Jones and Smith are continually harping on the druggist's incompetency, knocking him as a substitutor, etc.

Tell him that your syrup, absolutely true and mortar-made, shorn of all secrecy, is made for 17c a pint, whereas the others cost 67c, 90c and \$1.00 a pint, and that you are entitled to the extra profit and also that you can afford to deliver to poor people at a much lower price than would be the case if Jones' or Smith's was ordered and delivered.

Straight-from-the-shoulder Talk.

Talk business straight from the shoulder, and next day, or soon afterward, call upon your next physician and so on, until every one of your physicians knows that you actually do prepare the best Compound Syrup of the Hypophosphites that can be produced.

But now don't expect too much from what you consider the effort of your life. Don't expect every other prescription to call for Syr. Hypophos. Co., U. S. P. Don't expect anything, for if you do, you'll be disappointed. It doesn't work as fast as all that. Just work and be patient—you have driven the entering wedge.

CHAPTER II.

You have evidently set your physicians to thinking by your work on Syr. Hypophos. Comp., U. S. P.

A new light is dawning on him, fostered by his own medical associations, which are urging him to become more ethical and to study *materia medica*.

You notice his greetings even are different than formerly—you have touched him on a vital spot.

He Prescribes Standard Preparation— We Hope.

He prescribed this syrup several times lately, as you notice by your prescription file, and naturally it is a pleasant source of satisfaction to you to know that the profits went into your pocket and not into the other fellow's pocket.

Has the doctor's patient suffered because of the change? Not at all; in fact, the action seemed to be more definite.

What has this one act alone taught you?

This, that you are actually able to interest the physician, with profit to yourself.

Beginning of the War.

This then, in fact, is a beginning of the "fight to a finish" of the war on the secret preparations, and you realize that it is not so difficult if you will only make the start.

Just imagine this U. S. P. and N. F. propaganda as a series of solid steps leading up to independence. You have **put down** the first stepping-stone now, and place your feet upon it, viz., the secret Hypophosphites.

Now get your tools ready for putting down the next one. You have had many calls, both on prescription and ordinary sales, for the various patent clay poultices.

Make Batch of Cataplasma Kaolini.

Make up a few pounds of the official Cataplasma Kaolini and again go and see your physicians.

Tell him you have made up some antiseptic clay poultice, which is now official in the U. S. P., and that you have succeeded in making it very smooth and uniform—tell him just what's in it and how simply it is made, although it takes a little elbow grease.

The Doctor Can See.

He can see by its composition what it will do, that it actually would be an improvement over the patent poultices above mentioned.

Tell him that your price of manufacturing it is about 15c per pound and that the patent preparations cost wholesale 50c per pound, or over.

Tell him that very often people complain about the expensiveness of these dressings, and that they cannot afford them. He will very soon see the drift of your remarks.

How the Doctor is Cut Out.

Tell him that people ask for these preparations without a physician's prescription, even if the first package was purchased on a prescription, because the catchy names of these preparations render this easy.

Tell him that you are in a position to give people this preparation at a retail price that is no greater than the wholesale price of the ready-made secret preparation.

Work and Keep Working.

Work, keep on working, and never let up. Work hand in hand with your physicians, you will find them in earnest and ready to meet you half way.

Think of them as fellow workers, even though appearing to you as possessing peculiar views, likes and dislikes. You have "peculiar views" also, so put all this aside and get together and act like men.

Think of what it will mean when all bickering is forgotten, when propaganda work is brought to a successful working basis, and when secrecy is a thing of the past.

Don't Buy Physicians' Favors.

Now, Brother Druggists, whatever you do, do not buy a physician's patronage, good will or confidence with a commission on prescriptions—such patronage, or bartering, is unprofessional, entirely uncalled for, and some time will act as a boomerang to you.

As an extra spur in your efforts to help enlighten the physician just remember that the U. S. P. and N. F. contain nearly all the remedies of value, a few patented chemicals and new products excepted, and that the various forms in which these remedies are offered by the pharmacist (as contained in the U. S. P. and N. F.), will hardly permit of an excuse for the intelligent physician resorting to proprietary or patented articles.

Don't Knock; Always Boost.

It will probably bear emphatic repetition, that druggists must cease to blame physicians for prescribing specialties and for dispensing, and claiming they are forced to counterprescribe, take on agencies of all kinds, to make both ends meet.

Don't knock—find something to boost, and then boost it. Whose fault is it that conditions are as we find them today? If not yours, then certainly the generation of druggists before you—and are you going to leave as a legacy, a still worse state of affairs for the next generation?

The doctors alone could not have wrought all the mischief we complain of had they not had at least the passive assistance of the pharmacists.

Solution is Simple.

The solution of this question is so simple that probably its very simplicity

is the cause of its not having already been solved.

Now, we druggists, being all good American hustlers when once awakened to a proper realization of just what we want, will certainly **get to work**.

Work, that's all—intelligent work will bring success.

What the Educated Druggist Can Do.

You can, as an educated druggist, make every preparation that a physician may need (with a few exceptions). Make them and show him the results.

This is really all there is to it, when all the arguments are boiled down, strained and filtered.

CHAPTER III.

We have the first two stepping stones of our propaganda steps now securely mortared and naturally feel to be on solid footing, and can see our way a little clearer. Cataplasma Kaolini, as mentioned in the previous chapter, is certainly appreciated by the doctor's patients.

Special Work.

If you will now do some special work in assisting the doctor and indirectly helping yourself, as regards sending patients to the doctor, you will dig the grave of counter-prescribing and physicians' dispensing, and at the same time will firmly put into place the third stepping stone of your propaganda steps, and one of the most important ones at that.

There probably is no druggist in the United States who does not have one daily call from a customer for medical advice that really needs a physician's care, and to which the pharmacist generally attends himself in his own way.

Here are two typical instances that actually happened, in Chicago, in the writer's experience, and we will leave it to the reader to decide if the policy pursued was the correct one.

No Sale Here—But.

An elderly German lady, rather stingy but well-to-do, came into the store and wanted something for a sore finger which she had wrapped up.

When asked for more definite information she thought carbolic acid was about it, but offered to show the finger. It certainly was a sight, terrible to look at, swollen to double its natural size and of various colors, and so painful that she thought she ought to do something for it.

The temptation to give her 10c worth of boric acid, or carbolic acid, and \$2 worth of advice gratis, disappeared when it was considered a case of blood poison.

Must Sometimes Scare Patients.

Advising her to seek medical advice, she said: "Oh, no, not for that, I never was to a doctor yet." (She was 67 years of age.)

Ordinary means failing, she was told that in a few days she would have blood poison. This scared her and she consulted her husband. Then in the evening she actually consulted Dr. N., who pronounced the case necrosis of the bone, which it really was.

Seventeen dressings were required before the finger was healed, for which the doctor received \$25, the writer received \$3.10 for bandages, cotton and antiseptics, and the lady had her life—saved by the action of the druggist who did his simple duty.

Dr. N. said that a few days of useless washings with carbolic acid would have been fatal to the patient.

\$28.10 Instead of 10c.

So here a 10c sale was turned into a \$28.10 transaction, with profit to all three parties concerned, and what's worth much, that physician will have a good word and do good deeds for the writer in particular and probably for druggists in general for years to come. Did it pay to help this doctor?

The other case was that of a middle-aged American lady, very pleasant, and one of the best customers of the store. She came in at 7 o'clock in the evening and wanted some fever powders for her 4-year-old son.

Questioning failed to discover what

kind of fever it was—just a fever that did not amount to much, and just some simple little remedy was wanted.

Now the writer has always been averse to giving this class of medicines in particular, and argued that as there were cases of scarlet fever, also diphtheria and measles in the city at the time, it would be only just to her child and its parents, to go to a physician and make sure.

The lady actually felt offended to think she had to go to a doctor, and left the store in a huff. What passed in her mind during her return home to her husband is not known, but as they were always well treated in the store, they probably took our good advice, and as a result, called in Dr. B.

At 9 o'clock that same evening the lady came back with two prescriptions (where we confidently expected to lose her as a customer) and actually thanked us for refusing her fever powders.

Druggist Saves Life by Refusing to Prescribe.

The boy had pneumonia and a fever of 103 degrees. Comment is unnecessary—but if the fever powders had been given, the child would have died, as the physician told us.

In fact, he said that it was one of the severest cases of pneumonia he had ever treated successfully.

Now, Mr. Pharmacist, if you can see your duty so plainly to the public as to refuse them aid when they need a physician's care, you will have accomplished the most heroic and humane deed which you will ever be called upon to perform.

Paradoxical as it may seem, when you send people away thus, you are putting money in your pocket, you are doing grand preliminary propaganda work. Can you realize this?

The Golden Rule.

Don't meddle with other people's business, for a meddler is not a success at anything. You know that from experience with other people, and you always say, "if he would only attend to his own business, he would get

ahead," etc. You can apply this policy to yourself, for you are no different from other people.

Don't meddle with the doctor's business, but attend to your own. It seems dreadful that some druggists living in the twentieth century cannot learn the Golden Rule and the reasons why it should be practiced.

The highest ethics after all is but the most enlightened self-interest.

How It Pays.

It pays to be right and do right and it does not pay in the long run to be wrong and do wrong.

It is easy for you to see that if you show yourself ready and willing to help the physician by sending him his legitimate patients, it will doubly repay you; first, because you get more for his prescriptions than you would get by counter-prescribing, and second, it gives you a prestige with him that renders real propaganda work easy, for which he already is eager and hungry.

Begin now and see how many patients you can send your physicians, and when you see the actual results in dollars and cents, and the knowledge of "duty done," how much more of a man you will feel yourself to be.

As Dr. Stemmermann, of Passiac, N. J., so aptly puts it, "Mind your own business."

In Private Diseases.

As an appendix to this chapter, it may be said that it is very important that you insist upon a visit to a physician where your customer wants the habitual relief from gonorrhoeal and syphilitic diseases.

It may not work very well at the beginning, but soon you will be money ahead.

CHAPTER IV.

You have satisfied yourself that you are really able to make good standard medicines, and that it is possible for you to get away from the "lost habit" of manufacturing.

You realize that the profession of pharmacy actually calls for nothing but the preparation of medicines and that you have the necessary skill to do this work.

You realize, of course, that you cannot live off of the profits of your professional work alone, and feel justified in selling legitimate merchandise to help you make ends meet and to lay by a competency for old age.

However, from your experience so far, you have discovered that there is a bright future before you by working towards your real profession, the making of U. S. P. and N. F. preparations, and in the recommending of these and other non-secret and thoroughly tested remedies to your physicians.

A Bright Outlook.

There are few druggists in our country, who, by diligent work along real propaganda lines, cannot dispense with all their side lines if they desire to do so, ten or fifteen years hence. Such is the bright outlook for the future of pharmacy, and is here made as a prophecy.

You have made good medicinal preparations and have shown your physician that you are able to do this important work; he has recognized your ability by prescribing them, and he obtained the results he expected, sometimes better ones, so he is satisfied.

Not only is he satisfied that your medicine has acted right, but he has the additional satisfaction of knowing just exactly what medicinal agent has done the work; and when a physician knows this, he becomes a better physician and a better prescriber.

Ready for Another Step.

You have broken the ice—ice that until now has threatened to freeze thicker and thicker, until finally it could never have been broken. You have shown him that you intend to mind your own business by sending patients to him that need his care, not yours.

In fact you are ready to take the fourth step in your propaganda work—another step in the direction of your own absolute independence.

You know from experience that you can not do much alone, you are only one in 43,000; you must find a way to

prove to your brother druggists and competitors that it is really a good thing for them—you know it, for you have proven it.

Go and visit your nearest competitor and tell him what you have done. If you are alone telephone him; if you have no telephone write him a long letter.

Doubling Your Power.

Get him on your side—to your way of thinking—and keep at him until you do. When he does what you have done, you have doubled your power—that's better than going it single-handed.

Now at the very next favorable opportunity, go and convince another one, and your first convert will do likewise; then you will have quadrupled your original force.

Keep the main object in view at all times, namely: If you are successful in changing the nature of the prescription to what it should be, you will not only profit by it, but you will put pharmacy where it belongs, into the retail pharmacist's hands.

Half of Pharmacist's Work Diverted.

There is positive evidence to prove that less than half of the dispensing done at the present time is done by pharmacists, the dispensing doctors doing the balance.

This is a serious matter, of course, but don't let it worry you now. What you are after is to change the nature of the dispensing that you are doing now.

This change that you are bringing about will give you and your physicians such a prestige that many and many a dispensing doctor will drop dispensing for self-preservation's sake, for the greater a physician's success the greater the number of his patients, and these added patients can only come by their refusing to go to the doctor who dispenses.

An Unnecessary Evil.

When you have placed yourself in a position to show results, then you have proven that the dispensing doctor is an unnecessary evil, and it will then be an easy matter to compel him to quit dis-

pensing by legislative means, should such drastic action become necessary.

We would once more emphasize the phrase, "Mind your own business," to caution druggists to refrain absolutely from counter-prescribing in gonorrhoeal and syphilitic diseases, diseases of which a druggist knows absolutely nothing, and every druggist ought to know that he knows nothing of their scientific treatment.

Many and many, yes thousands of victims of these diseases, have been driven to the opium and cocaine habits, to insane asylums, and to untimely graves, by being deprived of a physician's aid in time to effect a prompt and permanent cure—and you are the guilty one who has deprived them of this aid, because you, for a few paltry dollars, have offered to cure them.

No, You Have Not, Effected Cures.

You don't believe this, you think you have cured them, you cite cases, but because you don't know the nature of these diseases, you have made these cases worse than they were originally, all your arguments to the contrary notwithstanding.

These diseases, or more properly speaking, the symptoms of these diseases, are checked by your treatment, but the terrible disease itself, the action of the toxin, is going on and growing with terrible accuracy, and is sapping the life of the patient, as sure as if he had consumption; in fact thousands of these cases soon turn into consumption.

And for what? Just because you are not man enough to mind your own business; just because a customer, ashamed of what he has done, successfully cajoles you into prescribing; just because of your unmanly thought that if you don't do it, some other druggist will.

Responsible for Deaths.

Unfair as it may seem to you, you realize that when one of these patients of yours dies from the consequences of your act, though it may happen five or seven years later, you are actually responsible for his death.

You may ask, What has this to do with U. S. P. and N. F. Propaganda

work? **Everything**, fellow druggists, everything! Mind your own business so a physician **can** mind his and will be willing to help you; that's **PROPAGANDA**.

CHAPTER V.

You should be fully able to realize the possibilities the future has in store for you if you will but work.

This work, queer as it may seem to you, is your life work, which you have fitted yourself for through the successive stages of apprentice, assistant, full registered clerk and proprietor.

But you are not alone in this work, nor will you ever be.

Your brother druggists are just as interested as you are, and a general movement in propaganda work is being instituted.

This movement will be a carefully planned and deliberate one, and consist of the work of yourself and your brother-druggists.

It will be doing in the aggregate by all pharmacists and physicians, what you have done single-handed before.

The N. A. R. D.'s Campaign.

In other words, a National campaign is about to be inaugurated, with the N. A. R. D. as headquarters for it.

(This actually occurred in January, 1909, and is a matter of history, with which most pharmacists are familiar.)

You may be somewhat doubtful of the results, thinking perhaps other physicians will not be so kindly disposed towards the project as those of your immediate acquaintance are.

Don't Worry.

Do not worry about anything, least of all about the physician's side of it; do all the worrying about yourself in so far as it may pertain to the actual work of making good standard, full-strength preparations. That's all any one will ever require of you.

You will recollect it was the American Medical Association, through its city, state and national organizations, that originated this movement some years ago.

hungry for knowledge of drugs and their action and are fast becoming disgusted with the "secret specialties" that have been foisted upon them for so long.

Now while the medical colleges are doing this work, it is your duty, being "on the ground" with information and material, to deliver sledge-hammer blows for the physician's assistance and in defense of your rights.

As has been stated once before, if you do intelligent propaganda work for a period of say, ten years, your business will be such that you might give up all your side lines that now use up so much of your capital, if you desire to do so.

We repeat this statement and will add that it will also solve the much mooted "scarcity of drug clerks" question, by giving clerks real pharmaceutical work to do and which will keep them in the ranks of pharmacy.

Three Forces Helping You.

There will then be three forces at work towards one common end—the physician, the pharmacist and his clerk—where now we have these three forces working away from this common purpose, the manufacture by the pharmacist of standard preparations.

Let this fact of your having actual and powerful assistance from the medical associations in your work constitute a fifth stepping stone in your propaganda work.

Get ready for the greater work you are about to begin by "cleaning house" if necessary. Let your physicians know that you would rather lose every other prescription than substitute once.

Ask his co-operation in doing away with the refilling of prescriptions and giving of copies.

How it hurts his income when his prescriptions are peddled from one patient to another is a question that can be touched upon.

These small matters are but preparatory steps in your great propaganda work, but they must be religiously attended to, for they are important.

If you will study the list of "New and Non-official Remedies," published by that association you will realize some of the work it has done.

If you will carefully read the "Propaganda for Reform in Proprietary Medicines," you will learn how hard that same association has been working to improve the conditions in the medical profession. You will note that reputable physicians are having a fight of their own, and they are constantly gaining ground.

This fight will be of no avail, however, if you do not meet the progressive element in our sister profession half way and help them carry forward the great reforms for which the propaganda stands.

This fight is peculiar and may be likened unto a half and half victory.

The Line-up.

The physicians are on one side, the pharmacists on the other, and the common enemy in between.

The physicians are routing the enemy but can only annihilate one-half of his rank formation; now before reinforcements can come the pharmacists must annihilate the other half.

Then you can walk over the battlefield strewn with the departed foes and fraternally "clasp hands."

What an inspiring picture, you say! How easy it is to theorize!

Not at all—theorizing is past—it has been demonstrated that such is indeed the process of annihilation.

It has been proven in Minneapolis, in Evanston, in Philadelphia, in Chicago and in other localities.

Get What's Yours.

How hard it seems for the ordinary druggist to go and get what's waiting for him—the pharmacist's just profits.

All you have to do is to—work.

You will find added encouragement in knowing that the physicians have been instrumental in bringing about a more thorough study of materia medica and therapeutics in the medical colleges.

You will find extra cause for enthusiasm in the fact that physicians are

Slow But Sure.

The great mistake which you are liable to make is the one common to most people, and especially to advertisers.

You are going to expect too much from your first preparatory labors—you forget that all real reform comes slowly—and that each small successful effort that you make is but a stepping stone to the next effort.

So much has been said about the "pleasure of work," the "happiness in working," the "love of work itself," that it is high time we realize what these phrases mean.

In our case they mean hard work for several years and then a pleasant realization of the fruits of this work.

An Example of Propaganda Work.

To give one good example of how propaganda work is helped by a physician's knowledge of what he is prescribing, the following may be important:

Dr. B., a fairly successful physician with a great leaning toward specialties, had a patient suffering from chronic constipation. The first prescription this patient, a lady of about 35 years of age, brought in called for a *Cascara nostrum*, 2 oz. It was refilled twice.

The next prescription called for *Pil. Cascara Compound*, Hinkel, pink, No. 50, and was refilled once.

A third prescription called for a third *Cascara nostrum*, 6 oz., tablespoonful doses.

Soon after, this physician spoke to us about this lady's case, and said that either *Cascara* was not a reliable medicine, or we did not have the genuine stuff, as he had been unable to notice any beneficial action in two months' time.

After giving this physician our view of specialties in a good natured way, we suggested that he try the real stuff, fluid extract of *Cascara Sagrada*, which we would vouch for to contain *Cascara Sagrada*. He did this, and while his patient complained of the bitter taste, he finally reported the case cured.

To our knowledge this physician has never since prescribed any specialty.

CHAPTER VI.

In talking on the subject of propaganda with a druggist from central Ohio, recently, he said: "I can understand now why there has been no such thing as a successful propaganda before, when I realize what *NOTES* has brought out in its last six or seven issues on this subject.

"Many druggists," he continued, "are inactive and content to remain in a certain rut, and need such a leader as *NOTES* to awaken them to activity, to cause them to resume their life's work, and come to a realization of where they have been drifting."

We would impress upon druggists therefore that they pay a little more attention to the manufacturing end of their business and become thoroughly familiar with the various processes, and before real propaganda work is begun, it will be well for you to start a little "get-together" meeting in your city, village or county.

The Sixth Step—Get-Together.

You have already interested a druggist or two, and one or more physicians; now with these two, three, or four as a self-appointed committee, as a nucleus, prepare a letter somewhat on the following lines, and send it to every druggist and physician in the territory you wish to cover.

Send the letter to **every** physician, no matter what his school.

No enmity, no personal feeling, no class distinction, no school distinction of any kind is wise or permissible in a "get-together" undertaking.

Many homeopaths and many dispensing physicians will be converted by this work, so direct your efforts to all.

If any druggist or physician is opposed to this movement or is simply inactive, take no notice of it.

Send any further notices or literature to all without exception.

The Invitation.

Dear Sir:—A hearty invitation is extended to you to come and be one of us.

Our first meeting will be Monday evening, November 30, at 8:30, in the club room of the Blank hotel.

You probably realize that the time is ripe for us to get together, to work hand in hand for mutual benefit, and how this can easily be accomplished will be explained at the meeting.

At subsequent meetings we will have good things to eat and refreshments.

We will draft a short set of rules and regulations, in regard to meeting places, etc., conforming to parliamentary practice and local conditions.

Should something unavoidable detain you from this meeting, kindly write to one of the undersigned that you are with us and will endeavor to attend meetings regularly whenever possible. Fraternally yours,

John Jones, M. D.,
Paul Smith, Ph. G.,
Ralph Rogers, M. D.

Blankville, Iowa, Nov. 21, 1908.

Have your rules and regulations ready for adoption at the meeting, and also have two short papers for reading before the meeting, one by yourself and one by a physician.

The Meeting.

When the time for meeting has arrived, open it promptly, stating that "we are coming together for mutual benefits, better understandings, to teach and be taught, etc., to dine together at future meetings, to fix meeting places, etc."

These meetings should occur monthly, quarterly or yearly.

Where the territory covered is a county or a part of a county, having several towns or cities, it would be policy to have the meeting place change from town to town, thus giving each place a chance to be host and dividing up the work.

There is plenty of material in this book for a paper at your first meeting, supplemented by some original ideas of your own.

Never mind the attendance at your meetings, but go ahead with the work as if everyone were present.

This creates enthusiasm and assures co-operation.

In addition to your real work at this and subsequent meetings you must prove your willingness and ability to ("mind your own business.")

By thoroughly discussing with your physicians the subject of counter-prescribing, refilling and copying their prescriptions and drawing your lines sharply, you are making sure of your footing.

Stand Firm.

Be firm in your stand when once you know you are on the right track.

Practice what you preach to the letter, knowing you are right.

You must persevere, for nothing makes for success like a reputation for persistence for the right.

If you know that your fluidextract of cascara sagrada, your compound cathartic elixir and your compound infusion of senna are exactly right, let nothing stand in the way of finally convincing your doctors that they should prescribe them in preference to any and all cathartics, even though it take you five years to convince them.

If you are known as unyielding, or can work up a reputation as being unyielding, your opponents will realize that they will have to give up sooner or later.

But if you are wobbly, or are on unsafe ground, they will never give up, knowing that you will finally be a quitter.

Propaganda work is right. It is justice to every retail druggist. So stand by your guns as long as you have life in your body.

CHAPTER VII.

How harsh it sounds to say, "Mind your own business," as has been the case in previous chapters, but just the

same when a druggist **does** mind his own business, and is aware of the fact, what a "genuine gentleman" it makes of him.

Attention has already been called to this matter in respect to saving people's lives and almost compelling them to consult a physician.

We will repeat and add to these statements that you can not get too much information to your physicians in regard to what you can do, and what you should not do.

If you will take an inventory of your mental stock you will discover the remarkable fact that you know absolutely nothing of anatomy, or of drug action on the human economy, or why a drug acts one way upon one individual and another way upon a second.

There is no place under the sun at the present time where you can do so much good for yourself, for your physicians and for your customers, as at a get-together meeting of physicians and pharmacists.

Why Discuss Headache Powders.

For instance, if you will at one of these meeting discuss headache powders, what will you learn?

Here is your story, as practised by many pharmacists at present:

A customer asks for K——'s Headache Powder, you give it and the customer is satisfied; so far, all right.

Another customer comes in and asks: "Have you anything good for headache?" Certainly, and a package of your own make is sold; you evidently feel justified here also, and we will again say—all right, but rather reluctantly.

Your third kind of customer comes in, and it happens every week, who says: "Have you anything that is good for headache, that will cure? I have tried everything and nothing seems to help."

Again your own make remedy finds a ready sale. This time, however, you were wrong, for your customer should have been sent to a physician. Why?

The Physician's Side.

Now here is the physician's story:

A headache is a symptom, and a symptom is a perceptible change in the body or its functions which indicates disease; for the causes of disease often lie beyond our sight, but we learn their nature by the symptoms exhibited.

Now then, if a person has headache, this person has a certain disease; it may be very simple, or it may be very severe; anyhow you, as a druggist, are no judge of what this disease is.

You are going to cure this "symptom" with a certain kind of medicine, of which you know not how, or why, or where it may cause action.

Because the customer does not know what ails him, and thinks he wants headache powders, is no reason at all why you should sell headache powders, if he gives you any chance to get out of it.

You should at least try to tell him that something more than a headache ails him, for if you can induce him to go to a physician, this customer may be cured of a disease that might eventually be fatal to him.

Does It Help?

Does not that help you in a dollars and cents way? Does not that help the physician? And is not the customer grateful for value received?

Answer these questions now! You must do it sometime.

Does it take such a vast amount of moral courage to tell people what they ought to do, when you thereby convert a present 25c sale into very probable \$5, \$10, or \$20 sales in prescriptions? (Remember the old, old "penny wise and pound foolish" maxim.)

On Dangerous Ground.

Here are a few of the many hundreds of diseases, one of whose important symptoms is a headache: Constipation, Anaemia, Nephritis, Abscess of the Brain, Diabetes, Rheumatism, Diseases of the Eye, Ear, Nose and Throat, Diseases of Sexual Organs, La Grippe and all fever diseases, etc.

Every one of these diseases is dangerous if not properly treated. Your headache powder will cure none of these, and by selling it you delay or

possibly prevent the patient from being cured. You can see this; can you not? Do you care?

You may say it's none of your business what ails people, just so you sell them what they want.

Now from a purely financial standpoint this is not fair to yourself, because experience will teach you that although once in a while you actually lose a sale that some other druggist will make, nine times out of ten the loss, or apparent loss, of one sale means one or more prescriptions and very often it means from \$10 and \$20 worth of prescriptions.

A Principle of Propaganda Work.

Is this propaganda work? No!—but it is a stepping stone, or a preparatory step, leading to that principle without which propaganda work will have no lasting benefit—the hand-in-hand working of the druggists and the physicians.

This kind of advice that your physicians will give you at get-together meetings will not be confined to headache powders; you will get the same good advice upon cathartic medicines, blood purifiers, etc.

In this manner you will slowly, but surely, exterminate the secret mixtures.

Probably no physician will say to you directly that "you should not sell headache powders when people ask you to suggest a remedy"; many probably don't care if you do it, but every one will admire your grit and moral courage if you send the proper cases to the physician, and your reward will not be long in coming.

Advice to Physicians.

Now, while your physicians are giving you advice upon these important subjects, you can do them the return favor by enlightening them upon subjects similar to the following: Sweet spirits of nitre has fallen into disuse for the reason that very seldom is any found on the market that is able to cure, or assist in curing, disease. Now,

however, when you make your own preparation and take proper care of it, you have an article that you can guarantee in every way, for it is made right, and you keep it in small, dark bottles, well corked and always in a cool place, thus assuring its quality.

Sweet spirits of nitre, if properly made and properly stored as directed in the U. S. P., is one of our most esteemed remedies, classing with such as aconite, quinine, etc., and physicians will be glad to know that you have thus brought to their attention this much neglected medicine.

CHAPTER VIII.

While we are on the subject of get-together meetings, we will ask you how you feel in regard to the attendance at your first meeting.

Are you downhearted that only seven are present when you sent out about eighteen notices? Surely not, for there are at least seven of you now where there were none before.

This is a fine attendance; really it is.

Making Real Friends.

Now see to it that you make these seven your friends before the meeting is over. If one of them, either physician or druggist, is one with whom you are not on good terms for some reason or other, go up to him and offer your hand. Say to him, with the best possible mien you can command, that you are glad that the opportunity has at last come when you can bury any differences that may exist between you.

Say you realize that one is as much of a man as the other, and that you would like to work in harmony with him, and that, instead of being inactive or hindering each other's progress, you can now make plans for bettering your own and the general conditions.

No man can resist this kind of talk. A feeling within him tells him that it is right and just to be brotherly.

It is this one first step of breaking the ice that is so hard to take, that is keeping you apart from your brother

druggists, or from your physicians.

But is it not worth the attempt? Just one word will do it. And what difference does it make whether you speak that word first, or he? The result will be the same.

Fraternalism Will Help.

For this giving in, this acknowledgment of equality, this fraternal feeling, acts like magic.

Fraternal feeling! Yes, indeed; and way down in your heart, locked up, you have that fraternal feeling, and you know it.

But you have just a little of that yellow streak, just enough to keep it locked, and only when many of us are on our death-bed are we sorry that it was kept locked up. You know that on his death-bed a person is willing to do everything possible to right a wrong, and really will do it if given the chance.

You know that one flower to the living is better than a whole carriage full of wreaths to the dead; so why don't you unlock that heart of yours, throw away the key, remove the yellow streak, and become one of nature's noblemen!

It is only another form of that display of moral courage which causes you to dump a spoiled syrup into the sink.

When you understand each other and are united, you can do anything that you set about to do.

"Get-Together" Subjects.

You have doubtless some peculiar method, original with yourself, in the filling or finishing of prescriptions that it will be a good idea to mention in meeting hours.

Mention the fact that you consider it very important how your medicines reach the patient—that every finished prescription is neatly wrapped in pure white paper (which is used for no other purpose), tied with light blue twine and sealed with red wax.

This makes a very neat, attractive package, and puts the patient or the one who administers the medicine, in

a reassuring state of mind, which is of great importance to sick folks.

A badly wrapped package without any attempt at neatness is apt to beget the impression that the medicine is not of much account, and such is generally also the case.

Another important subject for talks at meetings which would probably not otherwise come to notice in your propaganda work is the following:

Physicians are experiencing much trouble and delay in experimenting upon their patients with *Digitalis* as ordinarily prescribed, because too little attention is given to quality and detail in manufacture.

You examine your *digitalis* leaves very critically upon arrival, remove all stems and flowers, and make all your preparations from this stock.

(If you are in a locality where *digitalis* grows gather the leaves yourself.)

Common-Sense Statements.

You do not make your tincture of *digitalis* from the fluid extract, and you support your statement with a sample of each kind, and that you are a thorough believer in pharmacopoeial directions and instructions.

The same applies to infusion of *digitalis*, only with more force; it is really criminal to dispense an infusion of *digitalis* made from the fluid extract, as the manufacturer would like to have you do, (according to the label on his bottles).

Now you know that the fluid extract is made with diluted alcohol and this extracts principles which are not wanted when a physician prescribes the infusion.

You believe in making medicine right, for the sake of the medicine only, that the physician may be able to do some good with it.

Make a statement to the effect that to the best of your knowledge and belief every one of your pharmacopoeial preparations are such that you would have no hesitancy in using them in any prescriptions intended for your own wife and children.

And practice what you preach.

The Humorous Side.

You might make some humorous allusions to the experience that you and thousands of other druggists are having at the present time in regard to the detail man's new talking point, "standardization," which they work overtime.

The detail man finding there is nothing doing in the form of an order, tries to confuse and belittle you by asking from whom you buy your standard tinctures. You naturally reply you do not buy any, upon which he inquires how you expect to do business any longer, with such no-good tinctures as you make from digitalis, for instance; and the federal food and drugs acts in effect. You say you expect to do business the same as always, straight from the shoulder, and invite him to take a drink.

If the drink chases his little, hard, rocky heart to a standstill and there is a funeral next day—then the drink is on him.

But if it is inert, as he declares it is, then the drink would be on you.

But they never accept the proposition.

Your get-together meetings will always be profitable, enjoyable and enthusiastic if you want them to be so.

CHAPTER IX.

Eight steps up the propaganda breastworks have been taken. Just a few more and you will be on top, ready to begin actual fighting. It has been rather difficult to come this far, but anything worth having is worth fighting for, and we druggists are made of the stuff that will not give up, once our future possibilities become apparent.

We trust that all druggists who intend to take advantage of this grand propaganda movement, have well considered the various preparatory steps leading up to this movement, that they may be in the proper physical and mental condition to profit by it.

As we said in the beginning, you must first learn to walk before you can run, for this will be a running fight.

Druggists Are Thoughtless.

There are today hundreds and hundreds of thoughtless druggists who are advertising and recommending over their own names in the newspapers the various patent medicines.

These advertisements are in the nature of testimonials, many pure fakes, and proclaiming to the world at large how Dr. Shidepoke's New Discovery banishes the annual cough with a few doses, etc., and sold and guaranteed by "the druggist", 50c per bottle, trial bottle free.

To show the utter folly of this method of assisting the sick and of deriving pecuniary benefit therefrom, would be a simple repetition of what we have said heretofore, with some variations.

Look to Your Own Interest.

It is time for druggists to begin thinking, not alone of how to actually assist the sick, but also how to make more profits, as both birds can be brought down with one stone—this weapon, the stone, being cumulative propaganda work.

You can in the first place easily convince yourself that the sick are actually better cared for if you sell them your own family medicines and by sending the proper cases to the physician.

In the second instance, just figure out what a supply of drugs, corks and bottles you can purchase with only one-half of the amount you must invest in Dr. Shidepoke's Cough Syrup to get his free testimonial advertising, and then using the other half in your own way of advertising.

To illustrate, you purchase 1 gross of Dr. S's cough syrup, 25c size for \$17.75, get all this "free" advertising for 3, 6 or 12 months, make enemies of most of your physicians, and derive a profit of \$18.25.

When you make your own cough syrup, 1 gross costs you complete with bottles, corks, labels—and it is a first-class remedy—\$4.95; and you can spend (if necessary) \$12.80 advertising it. You will find numerous occasions now to send patients to the physician for his care, and for the sending of

which no physician will be your enemy, and you still have your \$18.25 profit.

Besides, you have whatever profit you make on the prescriptions from the patients you sent to the physician.

Now, which is the more humane course? Which is the more profitable? And which tends to make the harmony between physician and pharmacist?

Think, druggists, think of what you are doing!

The Only Profitable Course.

You may look at this patent, proprietary and secret medicine business from whatever angle you will, but if you will think just a little, you will find that the greatest cash returns will come to you by "being a pharmacist"—that is, making and selling your own medicines and using every possible opportunity to send the proper cases to the physician.

This is not theory, brother druggists, neither is it imagination. It is facts—stubborn facts that you cannot disprove.

If you will do these things and let your physicians know it, it will not be long before it will dawn upon you that your real bread and butter comes from this kind of work. It puts more money in your pocket, better clothes on your back and more happiness in your heart.

You are depending altogether too much upon others for your living, and such a hand-to-mouth living at that! Even when you yourself wish to take a little dose for indigestion, cramps, for kidney trouble, etc., do you mix up a dose from your U. S. P. or N. F. preparations, or do you take a dram or two from the "secret-mixture" bottle?

Druggists Humanitarians.

A druggist actually has more power for good to exert in behalf of suffering humanity than all other agencies combined, including physicians.

The whole question simply resolves itself into whether you will be a real pharmacist to help the sick and to make more money than you ever did before, or whether you will be content

to remain as you always have been, living from hand to mouth and working for the man that **does make things.**

One other very important theme that can be made a permanent feature of your get-together meetings, is this: When a physician finds difficulty in combining certain drugs, or is desirous of knowing what drugs could be added to one he wishes to use to make it more effective, what shall he do?

Inquire about such cases at each meeting and offer your services in assisting him to work out a nice preparation, that the combination may be active, presentable and palatable.

If your physicians are vehement in their denunciation of any particular medicine, or a preparation of the U. S. P. or N. F., which they are apt to be, then is the time for you to get busy and experiment upon improvements.

As an example you can point out the No. 1 Diarrhoea mixture of the N. F. "Sun mixture," which always has an objectionable precipitate, and which you make by macerating the various drugs, in the correct proportions, in a menstruum containing 6 parts alcohol and 1 part water.

You macerate this four days with occasional agitation and then filter it and you have a presentable mixture of full therapeutic value.

By working together in this way many desirable improvements will be made.

CHAPTER X.

Do you know, Mr. Pharmacist, you who get so few prescriptions, that propaganda work may revolutionize your business?

You should study well the letter and sampling plan as given in succeeding chapters.

Everything is possible for a physician or a druggist as regards honesty or fairness, and these letters might induce some dispensing physician to either write prescriptions or buy his preparations from the druggist.

Interesting to Country Druggists.

This is of peculiar interest to such

country druggists who are at present in an unenviable position as regards manufacturing U. S. P. and N. F. products and putting up prescriptions and in whose territory are probably five or six physicians.

It must certainly appeal to the druggist that the small investment which this work calls for, may be the means of his selling U. S. P. and N. F. products, either on prescription or otherwise, to one or all of the six physicians circularized.

It is possible, of course, that the expenditure of this money by yourself and the perusal of the letters and various circulars by the six physicians, may be barren of results, but experience has proven otherwise, as these physicians know that you are making an effort to interest them in these standard preparations, and they can appreciate such work.

Your Chance for Success is Good.

As you know that there are physicians who actually quit dispensing for prescription writing, and also that they are actually turning from the secret medicines to the standard preparations, you must admit that your case is far from hopeless.

You may be sure that these letters will have in them the very best of arguments to convince physicians that it is to their own personal interest to prescribe these U. S. P. and N. F. preparations.

As the dispensing physician is in a measure your competitor, you realize the difficulty you are in. Competition, as the old saying goes, is the life of trade; but the result of competition in your case is just the opposite—it is the death of trade.

The modern method is co-operation, and when you co-operate with your physicians, you cannot make matters worse, can you?

You might make them better and that is the reason you should bestir yourself and do what it is in your power to do, for there is neither use nor need of narrow-mindedness in this fight for your rights.

Why the Physician Dispenses.

You know if you will think a little that the dispensing doctor is a dispenser for the same reason that you are a buyer of large quantities of cheap fake medicines and other merchandise.

He has been so thoroughly drummed by the detail men in regard to medicines when he had very little therapeutic knowledge of drugs, that there was no resisting him and he derived his knowledge and all that goes with it from this source and was compelled to use the secret products.

For this you can blame the medical colleges for their lack of instruction in therapeutics and prescription writing, but they are fast condoning for the omission by now inserting these courses in their curriculums or enlarging them if already there.

You have been so thoroughly drummed by the patent medicine man, that you finally thought there was nothing else to do but to push their goods; you did it with such a vim that today the patent medicine proprietors have handsome stone cottages at seaside resorts and revel in European trips, and for this you can blame no one but yourself. You should have known better!

Now is **your** chance. The physician has had his eyes opened, is sick of the detail men's stuff, and is looking for real therapeutic knowledge, as it is found in standard text books.

Your eyes have been opened to the harm you have done to your business by being too largely sponsors for the patent medicine people.

Get Together, Work Together, Stick Together.

Now is your chance to get-together with your physicians. Act the detail man yourself and also "usurp" the functions of the manufacturing pharmacist and the patent medicine proprietor.

Can you not see this opportunity? It is as plain as daylight and right before you. It is the real chance of a lifetime.

Now for an illustration we will take one of your dispensing country physicians living in a village where yours is the only drug store.

Real Propaganda Work.

He buys all his supplies from some tricky wholesale house or from one of the numerous physicians' supply houses, and he has just received, we will say, your fourth letter.

He reads the business-like missive, which tells him that Hexamethylenamine is one of the official U. S. P. chemicals and a very valuable diuretic, prescribed in doses of 4 grains.

Also that the Compound Elixir of Buchu is composed of Buchu, Cubeb, Juniper and Uva Ursi in a very palatable form, and represents one of the most efficient diuretics in the N. F.

This physician may have read your three previous letters, but there might have been nothing in them that appealed to him, so nothing came of them.

The Clincher.

This time, however, he happens to have a patient with a case of kidney and bladder trouble of some months standing that so far has resisted his efforts to cure.

He has given of his medicine from week to week as he had it and, believing firmly that if his medicines would not cure, the case was one of those hopeless ones that sooner or later would prove fatal.

He sees in this letter Hexamethylenamine and Elixir Buchu Compound, medicines that he has not used as yet and, in fact, he has no actual therapeutic acquaintance with them.

His mind is made up at once and his patient is going to have Hexamethylenamine and Elixir Buchu Compound for his next medicine.

He may send to his supply house for them and many times actually does, but he remembers these other letters he has received telling of the druggist's capability; in fact, you have given him samples of these medicines.

He is studying a perplexing situation.

A Perplexing Situation.

The situation is namely this: Tomorrow his patient is coming for his medicine; he cannot get it from his supply house so soon; he wants his patient to have it as soon as possible now that he has the chance, and the druggist is certainly inclined to be fair.

His perplexity is of but short duration for he is actually coming over to see you, and he has not been in your store for over two years.

He greets you very pleasantly and purchases an ounce of Hexamethylenamine and 8 oz. of Compound Elixir of Buchu; he is going to try it on one of his patients, he says.

Now there you have, Mr. Pharmacist, an actual happening that really occurred, and which resulted in making a prescription writing physician from a dispenser, three months later. **Faint Heart Ne'er Won Fair Lady.**

Now if you have never attempted anything like this, try it. You may not be successful in four months, nor six months, but just as sure as fate, some of these letters are going to strike him in a sensitive spot some time, and then you've won.

It will not always result in prescriptions, but if it does not, he may make you his base of supplies. You may fail sometimes, but the chances are all in your favor, and if your preparations are right, you need fear nothing.

Although some of our U. S. P. and N. F. preparations will be improved in the next revision, they are among the best therapeutic agents to be had today, barring none, and physicians are discovering this fact every day.

CHAPTER XI.

The successful man is the one who goes after business, or in some way lets it be known to his prospective customers that he has something to offer, on which he intends making a profit.

If this "offering" will also be of benefit to the purchaser, either in money saved, or in making life more

pleasant, or both, the chance for a sale is greatly increased.

A Winning Proposition.

Should it even benefit a third party, in one way or another, it does seem that this seller has a winning proposition.

And that is exactly what the retail pharmacists of our country have today, a "three times" winner.

In going after business—that is, detailing the physician—you need not be a hypnotizer or a sharp salesman, although you will come in contact with both.

At least you will have to undo the mischief that these hypnotic salesmen have brought about.

Have you ever noticed that when you have a difficult or unpleasant task to perform, the difficult or unpleasant part disappears as if by magic the moment you start actual work upon it?

So it will be in this case where you have a dark age relic of mystery surrounding every step in the making and detailing of the secret nostrums.

As sunlight will purify the dark, gloomy, damp and uncertain atmosphere of a cellar, so light and truth about medicine will be the only weapon you need in fighting your battle.

Stealing the Detail Man's Thunder.

All the claims a detail man has are embodied in the following general parrot-like repetitions:

(1) "Over 50 years constant laboratory experience enables us to reach results not ordinarily obtainable."—The U. S. Pharmacopoeia has been in effect since 1820, and hence our best scientists and laboratory experts have been "reaching results" for over 88 years; are constantly revising the U. S. P. to give pharmacists the best possible instructions in preparing medicines, and if it had not been for this same pharmacopoeia, these manufacturing concerns would have had absolutely nothing to work with, to "reach results."

Exposing Scientific Specifics.

(2) "The formula is very valuable and the ingredients entering into the

composition of our wonderful specific are skillfully prepared and compounded by a special process, with the latest improved machinery, etc."—All formulas are valuable to the manufacturer until the physician knows their composition and then the physician is not so sure of its value. The skill used in the preparation is generally supplied by a \$6 a week boy or a \$4 a week girl, and the "special process" consists in pouring the ingredients by means of a gallon measure into the "special machinery," a large barrel with a faucet and a stirring paddle.

It is truly wonderful how these mysterious, secret, yet highly scientific medicines are prepared and when finally brought to light and exposed as has been done so often, are found to have their origin in attics, blacksmith's shops, rooms in office buildings, etc.

You as a pharmacist show your preparation and also the recognized official formula and method of preparation, and the physician is sole judge of it all—composition, purity, process and apparatus, and can form some definite idea of what it will do to the peculiar anatomy of his patients.

False Claims and Testimonials.

(3) "The ingredients of our preparation and their amounts are as follows, and the many flattering testimonials we have, etc."—Examination has repeatedly shown that these claims are absolutely false, some of the ingredients not being present in any amount, and the preparation would have an entirely different physiological action if they were. The testimonials are usually purchased by the hundred from "testimonial agencies," and are, of course, only exposed when some one actually writes to "find out."

Your preparations need no testimonials, as they represent the highest art in the science of medicine as at present practiced.

Prescribing Original Packages.

(4) "That you may be absolutely sure of getting the genuine stuff, pre-

scribe only in original bottles, sealed, for then the druggist cannot substitute."—And when the doctor does this, the druggist, of course, must obey orders, so the patient gets the sealed and wrapped parcel, takes it home, and hurrah, the label says that "Prof. Sharp's Tongalum" is composed of all these scientific chemicals, is good for pain here and aches there, one teaspoonful every so often, and everything else necessary for a complete cure is given. Then, of course, all the aunts, and grandfathers, and country cousins who have any similar ailment are going to buy "Sharp's Tongalum" from their druggist or department store, for did not the doctor prescribe it!

You mention the fact to your physician that he got one fee, probably only \$2, for prescribing "Sharp's Tongalum" to at least 50 dear friends of his original patient, where if he had prescribed an official preparation by its official title this could not happen.

Detailing Medical Advice.

(5) "You as a physician can see of course that with this medicine prepared as I have stated, you can cure the most complicated cases of impaired constructive metabolism where the blood pressure is normal, and you can therefore cure such diseases as the anaemia of tuberculosis, chlorosis, menstrual disorders, nervousness, etc."

This kind of medical advice, coupled with the fact that the discovery is new, although eminent scientists have for years experimented with it, generally produces the desired results, as the physician knows the meaning of the medical terms and naturally accepts the balance of the statement as bona-fide.

You, of course, would not tell your physicians how your preparation will act, medicinally, because you do not know, you being only responsible for its quality and genuineness.

However, your physician, knowing from long experience that he has generally been taken in by these givers of free medical advice, will commend your purpose, for you at least are

going to give him a chance to do some thinking for himself, merely supplying him with the medicine.

Official Medicines Will Win the Day.

Any pharmacist who loves his profession and can prepare a first-class medicine from pharmacopoeial formulas, can talk any detail man "to death"—because you are talking truth about the best there is in medicine, and he is repeating, parrot-like, what his employers told him to say about "their" scientific methods and wonderful combinations, and which exist only on the paper that carries the ad. or in the mind of the agent who does the talking.

It will be "the survival of the fittest"—truth, simplicity and openness against dishonesty, secrecy and fraud, and when once the druggist is awake to his power and to the real and actual harm being done by these detail men and agents, the fight will be short, sharp and decisive.

It is suggested that every druggist procure a copy of "The Propaganda for Reform in Proprietary Medicines," and read it.

Knowledge is power, and this little volume will give you much additional information about the "why" or "wherefore" of propaganda work.

CHAPTER XII.

No one ever yet got anything valuable that he did not deserve. If your pharmacy is making a good living for yourself, you may be sure that you deserve it and that it is not luck. On the other hand if your business is not what it should be, it is your fault. You either picked out a wrong location or you are not properly serving your customers. It is not "poor luck" by any means.

So it is with interesting your physicians in U. S. P. and N. F. preparations. Only this is an easier matter and more profitable than any other branch of your business; and besides, you will surely get what you deserve here, because everything has been planned by a master mind and a master organization.

You are going to sell something if you can work up some genuine enthusiasm, for this propaganda means cash sales for you with the correct profit, something many pharmacists have not had heretofore.

Red Blooded Pharmacists Needed.

But you need enthusiasm, that's all—not merely loud talk or extravagant statements, but genuine enthusiasm. No one, not even a physician, likes lukewarm people. They like to see and hear red-blooded, earnest folks, be they druggists, detail men, patients or others.

This enthusiasm must be a steady, constant quantity, firmly implanted in you. You have everything at hand needful for its existence.

You have the best preparations that can be prepared today excepting none, and you need the money that their sale will produce, hence you should become an irrepressible enthusiast. It will pay you handsomely.

You may be a druggist of but average oratorical ability, but because of your fearless stand for right and justice in medicine you are able to batter down all opposition that the wrong sort of a physician or the detail man can muster.

For instance, you are taking a sample of Syrupus Bromidorum, N. F., to your physician and the physician sees its formula. He sees that a teaspoonful contains about 15 grains of the combined five bromides, and he knows just exactly what is doing the work when he prescribes it.

You mention the fact that this syrup is not a new chemical compound, but simply a solution of five pure bromides with appropriate flavoring ingredients, and if the physician knows the action of bromides on the system, he will either prescribe this syrup or he will write a prescription using his own proportions of bromides.

Trouble Breeders.

You might tell him that when he uses any of the secret nostrums, advertised to contain bromides, he is absolutely at the mercy of the manufacturer, whose preparation may contain

ingredients that are a positive harm to his patient.

It happens very frequently that powerful drugs are contained in these secret mixtures for immediate effect, for advertising purposes and to show the physician that the stuff "works." The maker can put into or remove from this nostrum whatever he pleases and whenever he desires to do so, and he need ask no physician nor an official inspector of the Pure Food and Drugs Act whether he may or may not.

This, of course, can never be the case with a U. S. P. or N. F. preparation.

Study this propaganda movement thoroughly and put your whole soul into it.

Fake Claims.

The great majority of manufacturers claim that numerous N. F. preparations are imitations of their own secret mixtures. This statement can be disproved in many ways with most of the official N. F. products, and is quite largely false and misleading and made for advertising purposes and with a forlorn hope of being able to put a damper on the propaganda movement.

How can anyone imitate a secret mixture whose composition is mostly vegetable and whose formula is known only to the manufacturer?

While an imitation may be produced that has the color, taste, smell and general characteristics of the original, it appears that the vast majority of the N. F. preparations have sufficient merit in a therapeutic sense to induce physicians to prescribe them in lieu of the secret mixtures. There cannot be much imitation about such preparations.

Nostrums the Real Imitations.

It is peculiar also that most of these secret nostrums have acquired what activity they do possess since the U. S. P. and N. F. have been so thoroughly revised in the two latest editions, revisions brought about by the activity of our men of science and research who intended to make the books what they are, authorities.

The Seven Classes.

Secret nostrums, proprietaries or patent medicines may be divided into seven classes for the sake of convenience:

1. The peddler's patent medicine, often composed of harmless infusions, linseed oil, etc., made by people generally too poor to pay for a printed circular, and peddled from house to house.

2. The ordinary patent that lines one whole side of a druggist's store room, sold by newspaper advertisement and window displays, and whose virtue in many instances resides in the amount of money spent for advertising.

3. The * * * * Chemical Company's specialty, of the type so numerous and whose composition consists of those new fancy named chemicals and scientifically extracted new proximate principles.

4. The various acetanilid and coal tar preparations that come from no one knows where except the manufacturers.

5. The newer form of Patent Prescription Medicines, of the Kargon, Oil of Pine, Barkola, Spirené type.

6. The struggling pharmaceutical manufacturer's full line of specialties, whose claim of imitation is so loud and who tags a new name on to every U. S. P. or N. F. preparation that he thinks will sell.

7. Last, but not least, comes the rich manufacturing houses' strictly scientific and other specialties.

Their Object.

There you have a fairly complete list, and what is the object of them all?

Money! Power! Wealth! Honorable Positions! Money!

Have any ever, at any time, considered the sick?

Have any ever considered the druggist or the physician?

And here, in silence, the real medicine, the real benefactor of the sick, honest medicine as prescribed by the

U. S. P. and N. F., stands idly by and looks on.

Pharmacists of America, awake!

If you are the real benefactors of the sick, as you claim to be, can you be idle much longer?

These seven classes of secret medicines are here because the people and the physicians have been told about them and about them only, and no one has told them that U. S. P. and N. F. preparations and non-secret remedies were in existence.

The character of these preparations is such that when the searchlight of investigation is turned on them they fade away into nothingness, therefore the pharmacists should turn the searchlight upon them.

CHAPTER XIII.

It is with genuine pleasure that we present the following letter from a physician, that those few druggists who are still asleep on the propaganda movement, can realize that the doctors are going to do their level best to help the movement along.

And when the N. A. R. D. and the physicians are fighting for such a grand movement as this, who is so pessimistic as to doubt the result, which result will consist in supplanting the secret specialties, tablets, etc., by U. S. P. and N. F. preparations on physicians' prescriptions.

Medical Association Man With Us.

Brose Horne, M. D., corresponding secretary of the Indiana Electric Medical Association, Gas City, Ind., writes in substance as follows:

"I am a graduate of the regular and eclectic schools of medicine, but about eight years ago I saw where this 'Hand-me-Down' and 'Ready Made Tablet' system of medical practice was causing the profession to drift.

"For several years I have written articles against the system, but now we are going to make a systematic fight against this evil as an organization.

"The druggists should be with us and help us, because every druggist

knows that as far as these thousands of tablets are concerned, many even of questionable therapeutic value, they are sold directly to physicians, thus cutting out his prescription work entirely.

"To speak personally, I write more prescriptions than all the other local doctors combined and also do more business. I am interested in this propaganda movement from a scientific standpoint, and through this organization we will make some progress.

"What we must also do is to arouse public sentiment, enlighten the laity respecting this evil, prove that it is wrong in theory and practice, for when the people understand this secret mixture and tablet form of medication, they will refuse to take this kind of stuff.

"But, most of all, enlighten your physicians. If these insidious forms of medication continue, medicine and pharmacy will suffer irreparable loss."

Time to Work.

Now, Brother Pharmacists, when a physician appeals to you for help, when the most powerful organization of retail druggists in the world (the N. A. R. D.) appeals to you to help and is teaching you how to help, don't you think it is time to pull off your coats and pitch in?

You know, Brother Pharmacists, that the greatest evil that besets our profession today is secrecy, as manifested in nostrums, and this evil can only be thrown off or eradicated by organized effort, hence any pharmacist who does not encourage this organization project, as exemplified in the N. A. R. D., with not only his time and personality, but also with his money, is a foe to his own interests and helps to block all attempts made to improve his condition.

It must be done with the pharmacist's own money or it will never be done.

We have before stated the self-evident fact, that "This change that you are bringing about will give you and your physicians such a prestige that many a dispensing doctor will drop dispensing for self-preservation's sake,

for the greater a physician's success the greater the number of his patients, and these added patients can only come by their refusing to go to the doctor who dispenses."

Dr. Horne Furnishes Proof.

We have further proof of this in Dr. Horne's statement when he says: "I write more prescriptions than all the other local doctors combined and also do more business."

This is a significant statement and should be an incentive to dormant druggists to become alive to the all-powerful and far-reaching effects of propaganda work.

One fault you needs must overcome and only one, inactivity; you have everything on your side with which to win—honesty, principle, humanitarianism, the N. A. R. D., and the physicians; opposed to you are the inactive, pessimistic, croaking druggists, the subsidized journals and house organs and the manufacturers of "Specialties."

Your field of action is spread out before you and it can be likened a good deal unto the condition that our Revolutionary forefathers faced in 1775.

Taxation Without Representation.

If you will recall the causes that led to that bloody eight-years' war you will be astonished at the similarity between that fight and our propaganda fight.

It's a long road that has no turning, and as our patriots were a peace-loving and peaceably inclined people, they stood England's oppression till they could bear it no longer.

Our propaganda campaign is a parallel one, as the druggists have stood the oppression from the manufacturer kings and the pseudo-chemical company barons until the time has come when we will fight, must fight, for self-preservation.

The N. A. R. D. is lining up its forces in the most intelligent way. It has provided the weapons and the ammunition, and is only asking its members, the grand army of pharmacists, to actively engage the common enemy.

The duration of the fight is simply a

question of funds, the ultimate result is never even in doubt.

Money talks—let yours talk for your own good, and may the present needs of our noble cause hasten your conclusions. You are in a grand profession that has a most rosy outlook for the future, but it needs men to keep it clean and money to fight its battles.

CHAPTER XIV.

Do you know the real truth as to why many physicians do not prescribe, that is, do not write prescriptions for the pharmacist to fill?

The real truth is a long story, with real blame attaching to both pharmacists and physicians, but the campaign for a more extended use of U. S. P. and N. F. preparations makes it of the greatest importance that physicians and pharmacists become better acquainted, professionally and socially, than ever before.

The First Offense.

The pharmacist heretofore has been credited with being a poor business man and therefore has done many things that a good business man would never think of doing.

The guilty party who first refilled a prescription belonged to this class and only looked nearsightedly at his customer's wants, never dreaming or being able to see that the physician ought to have something to say about it.

He refilled it because he did not know what else to do, and so he unconsciously set a precedent that has caused seven-tenths of all the estrangements between the two sister professions.

The Second Offense.

The physician also has heretofore been credited with being a poor business man and he also must plead guilty to the charge.

When he first discovered that one of his prescriptions had been refilled, he was probably so pleased because his medicine had some effect that he would not have said a word against it for anything in the world. And hence another precedent was set.

Here we have two simple, innocent precedents, and the cause of more mischief than any other two professions or trades ever had to contend against in the world's history.

Sound Reasoning.

If the aforementioned pharmacist would have reasoned in harmony with sound business principles he would have thought: "Let me see, that physician knows what he is doing or this prescription would not have come back for a refill, and as this patient was benefited, he got his money's worth, so I will do my duty by the physician and let him treat his own case, and send this patient again to the physician."

Again, if that physician had reasoned that his bread and butter came from writing prescriptions and keeping his eyes on his patients until they were well, he would have told this patient under no circumstances must he get that prescription refilled before consulting him about it.

The disciples of both professions, therefore, are guilty of this awful mistake, and the result of this guilt has led to all those evils that have caused disharmony in the medicine family.

Prompt Action.

When the Pure Food and Drugs Act went into effect, the following phrase was thought necessary on all articles affected thereunder: "Guaranteed under the Food and Drugs Act, June 30, 1906."

However, in the short time of thirty months, the government has discovered the harm done to the people and the benefit dishonest manufacturers have derived from this innocent phrase, and hereafter all articles affected under this law must bear the following "Guaranteed by (here the name of the guarantor must be inserted) under the Food and Drugs Act, June 30, 1906."

The wheels of justice may grind slowly but they grind exceedingly fine; in this case, however, the wheels were prompt in grinding.

The government knew the cause of the mischief and promptly applied the remedy.

The Remedy.

The pharmacists now know that the cause of many physicians' refusal to prescribe is that they refill the physicians' prescriptions, thus actually countenancing self-medication and denying the physician the right to practice his profession.

The remedy is plain, simple, easily applied and effective: Tell every prescribing physician with whom you may have dealings and also every physician in your territory who dispenses, that you will hereafter not refill any prescription under any circumstances, **providing he will properly co-operate with you.**

This co-operation should consist of the physician marking his prescriptions "No. Rep." (not to be repeated), or to tell his patients that this prescription must not be refilled (for this the physician can best give his own reasons), or he should do both.

Let the physicians know that as they are the sole originator of the prescription, you will willingly co-operate with them to the extent of your ability, in order that they should have complete control of it.

Settling it Right.

There is absolutely no difference in the promiscuous refilling of prescriptions and the treating of serious cases of disease by the pharmacist, and the sooner the pharmacists realize this, the sooner will prescription writing revive and propaganda work become effective.

This mischief has been brewing so long and has fastened itself upon the professions so firmly, that many imagine it is a settled condition—but it is not settled by any means, and will not be until it is settled right.

This subject makes most excellent talking material for get-together meetings, for personal in-the-store-or-office conversation, or as the basis of a letter to physicians.

Counter prescribing and the refilling of prescriptions are exactly diametrically opposite to good pharmacy, and every physician knows it and is waiting for the change.

There are, manifestly, other reasons

why some physicians do not prescribe, but all are a modification of, or an outgrowth from, the original sin before stated.

Realizing and Acknowledging Results.

As thinking physicians, however, are beginning to realize the therapeutic effectiveness of prescribing standard preparations and the utter foolishness of their own, generally careless, dispensing, a change is gradually coming over them.

This change is being brought about in their association and society meetings, and is intelligently promoted by well informed and alert pharmacists.

The association physicians are front and foremost in advocating valuable changes, and their words are eagerly assimilated by other physicians, often times by physicians who never would think of joining an association.

And you will be surprised at the power and influence the physician will command with his fellow members when he tells them how anxious you are to do away with the refilling of prescriptions and your reasons for it.

There is no tonic so efficient for your welfare as "minding your own business" and doing it thoroughly.

CHAPTER XV.

The first gun in the propaganda war of the N. A. R. D. was fired JANUARY 14, 1909, and it is hoped that this day will be a memorable one, marking the **beginning** of the **end** of secrecy in medicine, through the efforts of the N. A. R. D.

The following letter was sent on or about that date to thousands of physicians in the United States:

Dear Doctor:

Our association has undertaken to supplement the excellent work that is being done by the American Medical Association in helping physicians to advance their own interests and the welfare of their patients through prescribing the preparations of the Pharmacopoeia and the National Formulary.

The A. M. A. deserves lasting praise for what it has accomplished in showing physicians the hurtfulness of prescribing proprietaries—articles that are not recognized by the official standards which have been adopted by the National and the various State governments.

The U. S. P. and N. F. preparations are desirable among other reasons:

Because they possess definite quality, composition and strength.

Because they are obtainable from capable pharmacists everywhere.

Because, by their use, incompatibility (which is constantly liable to occur and which cannot be anticipated, in the case of secret formulae) may be avoided.

For these and other reasons, the Pharmacopoeial and National Formulary preparations may be relied upon for uniformity and dependability; satisfactory results will follow their use.

Among the **DISADVANTAGES** of prescribing **PROPRIETARY** preparations may be mentioned:

That what their composition is, nobody but the manufacturer knows; they may or may not be reliable.

That their composition may be altered at any time to suit the purpose of the manufacturer without the physician becoming aware of the changes made.

That the same article frequently parades under different trade names, slight changes in physical appearance and the adoption of new names being all that is necessary for this purpose.

That these articles are nearly always accompanied by circulars which encourage self medication by the laity.

That very often they are advertised over the heads of physicians directly to their patients, thus making physicians unpaid agents for the selling of proprietaries.

We feel that you are interested in whatever will assist in bringing about better conditions in the practice of medicine and that we will receive your co-operation in the efforts we are putting forth to aid in this work. The movement we have taken up is rapidly growing in popularity among physicians, many of whom gladly attest the beneficial results of prescribing as far as possible ethical preparations only.

Under separate cover we are sending you a copy of the booklet, "Some Important U. S. P. and N. F. Preparations," which will again bring to your attention how completely the Pharmacopoeia and the National Formulary equip you with effective weapons for combating disease. May we not rely upon you to prescribe these preparations to the exclusion of others less deserving of your consideration?

Thanking you in advance for your anticipated co-operation, I am,

Sincerely yours,
THOS. H. POTTS,
Secretary.

A second sheet was also enclosed, on which appeared the following:

THE following three preparations are worthy of your careful consideration, and we believe it to be of great advantage for physicians to know the exact composition of every preparation that they prescribe:

ELIXIR FERRI, QUININAE ET STRYCHNINAE PHOSPHATUM, U. S. P.

(Elix. Fer., Quin. et Strych. Phosp., U. S. P.)

This preparation contains in each teaspoonful dose, one grain of Phosphate of Iron, $\frac{1}{2}$ gr. Phosphate of Quinine and $\frac{1}{60}$ gr. Phosphate of Strychnine.

Similar Elixirs placed on the market by manufacturers do not agree in composition, nor in strength, and in many cases the salts are not even present in phosphates.

It is an efficient general tonic, palatable, and always of uniform and reliable composition.

LIQUOR ANTISEPTICUS, U. S. P.

This preparation is a mild antiseptic, very efficient, and is to be used in such cases where Antiseptics like Mercuric Chloride, Carbolic Acid, Iodoform, etc., are objectionable.

It contains in a 25 per cent Alcoholic solution, Boric Acid, Benzoic Acid, Thymol, Eucalyptol, and the oils of Peppermint, Wintergreen and Thyme.

It can be used internally and externally, either full strength or diluted with from one to four parts of water; average dose, 1 teaspoonful.

The solution is colorless and has a pleasing, fragrant odor.

ELIXIR TERPINI HYDRATIS CUM HEROINA, N. F.

This Elixir represents one of the modern expectorants, valuable as a cough sedative. It contains in each teaspoonful dose one grain of Terpin Hydrate and $\frac{1}{24}$ gr. Heroin, with Aromatics, Glycerin and Syrup. It contains 40 per cent Alcohol, the least amount that can be used to hold the Terpin Hydrate in solution.

A very palatable preparation of pronounced efficiency.

Your local pharmacist will doubtless call on you in a few days at your convenience and present you with a sample of these preparations and will be prepared to answer all questions in relation to them, thus enabling you to properly judge them.

Your New Field of Activity.

As soon as possible after the physician's receipt of this letter, pharmacists were urged to call upon him and in their own best and happiest way tell him that you are bringing for his inspection samples of a few official preparations, somewhat as follows:

Tell him that in the U. S. P. Elixir of Iron, Quinine and Strychnine Phosphates, both the Quinine and Strychnine, as well as the Iron, are present as phosphates and which adds so materially to its therapeutic value; and to make this statement do its full duty, emphasize it by saying that similar elixirs placed on the market by manufacturers do not agree in composition, nor in strength, and in many cases the salts are not even present as phosphates.

Why the Best?

Tell him that the highest authority, the Pharmacopoeia, prepared and revised by physicians and pharmacists, proclaims this preparation as the most efficient of its kind that can be prepared; an authority that considers neither personal gain, money cost, favor, or any other questionable factor; an authority that considers only the honor of providing the sick with the best there is in medicine.

The sample of Liquor Antisepticus you are asking him to prescribe is considered by this same authority a mild and efficient antiseptic. It is useful in combating inflammatory conditions of the mouth, throat, ear and nose; a valuable dentifrice, especially in combination with peroxide of hydrogen; useful as a douche, or tampons, either diluted or not, as occasion may warrant; internally it may be used with advant-

age to arrest decomposition of the contents of the stomach and intestines.

This solution was devised by the competent authorities who make the Pharmacopoeia in order that an efficient and uniform preparation might be available for cases where antiseptics like Mercuric Chloride, Phenol, Iodoform, etc., were objectionable for some reason.

Minding Your Own Business.

The position which you must assume in sampling any preparation is that you are master of your preparation, and also that your education has fitted you, in a general way, to say what therapeutic properties it possesses, or diseased conditions it may overcome; but the ability to recognize these diseased conditions in a person is **the physician's exclusive domain.**

And in accordance with your exact interpretation of this indisputable fact will you be successful in this propaganda movement.

The Physician's Right.

The Elixir of Terpin Hydrate with Heroin represents one of the modern expectorants, valuable as a cough sedative. It contains 40% alcohol, which is the least amount that can be used to hold the terpin hydrate in solution. Should a physician not take favorably to this alcoholic content, you might mention that he prescribe the combination in capsule form.

One strong feature of your talk, in which all danger of working overtime is removed, is that **you consider it the moral right of every physician to know the exact composition of every preparation which he prescribes**, and that for this purpose the N. A. R. D. propaganda movement was instituted in behalf of the U. S. P. and N. F. preparations.

CHAPTER XVI.

As the physician as a rule is much concerned regarding the palatability of a preparation, and as you are going to sample him with preparations that are very often new and unknown to him, you must impress upon

him, first and foremost, the fact that your preparation is palatable, if it is so.

If the preparation is not palatable and cannot be made so, let the fact be known; the physician then will know whom he can prescribe it for, and for whom he can not.

Patients Have Different Tastes.

To illustrate, the Elixir of Iron, Quinine and Strychnine Phosphates, with which you will sample your physician some time, is considered by some medical practitioners a palatable preparation for some of their patients, and for others they would not prescribe it, because the bitter taste would absolutely prohibit these other patients from taking it.

Here is where your knowledge of other similar preparations is of value, and you suggest to these physicians that they prescribe the combination in pill or capsule form, or possibly in some of the other combinations of Iron, Quinine and Strychnine, found in the U. S. P. and N. F.

The Exact Status of the Pharmacist.

This actual propaganda work brings out the exact status of the pharmacist as regards his qualifications and proves definitely that if pure drugs and chemicals are used in the manufacture of a preparation, and the plain and simple directions for making it are followed intelligently, a reliable preparation will result—no guess work, no if, but, or because.

No liberties of any kind must be taken with the purity of the ingredients, the details of manufacturing, nor the method of preservation.

Details Very Important.

We have in mind such a preparation as the above, the Elixir of the Phosphates of Iron, Quinine and Strychnine, with which some pharmacists will at times overlook important details, small in themselves, but important as regards the finished preparation.

The mere fact that it **has** been made right should be sufficient proof that it **can** be made right.

The first and more generally overlooked detail is that the "soluble ferric phosphate should be kept in amber-

colored, well-stoppered bottles, protected from light," and then the application of common sense tells us that "a solution of this salt should also be kept in amber-colored, well-stoppered bottles, protected from the light."

The pharmacopoeial description, page 161, "thin, bright green, transparent scales," etc., gives you no opportunity to use anything else, and a salt of pharmacopoeial purity is manufactured by all reliable chemical houses.

This effectually disposes of the fact that if your Iron Phosphate is right and you store the Elixir in a dark place or in a dark bottle, your preparation will **not** change color, and experience proves this to be a fact.

More Details—Precipitation Prevented.

Further directions specifically state that the solution of Ammonium Carbonate in Acetic Acid shall be **neutralized** with Ammonia water and also that the aqueous solution of Ferric Phosphate shall be **neutral**.

What does this mean? Simply that to these solutions, if acid, (that is, turning blue litmus paper red) just enough Ammonia water shall be added until the blue litmus paper ceases to turn red—that is, until neutral.

Should you accidentally have added a small excess of Ammonia water, making the solution alkaline, this fact will be shown by its turning red litmus paper blue, and can be corrected by making the solution neutral with acid, using Acetic Acid for the Ammonium solution and Phosphoric Acid for the Iron Solution.

These official directions are easily complied with, **but they must be complied with**, for if followed, they prevent precipitation.

Why These Statements.

Manufacturing concerns are said to have stated that a stable Elixir can not be made according to the formula in the Pharmacopoeia, but such is not the fact. If such a statement has been made with apparent truth, it is due to the fact that some operator was incompetent; or it was made for purely selfish or sordid reasons, a practice which some houses are prone to employ in

making a market for more or less questionable goods.

Pharmacists to-day are better qualified than ever before to prepare medicines scientifically and true to their formula, and this is due in a large measure to the skillful training employed and intelligent methods pursued by them in making the official preparations with which the physicians have been sampled.

Proprietary Treachery.

By keeping the physician informed of cases where the proprietary preparations are advertised to the public after he has created a demand for them through prescribing, you will convince him of the folly of enriching these proprietary concerns with no benefit to himself.

Such cases are continually bobbing up as the propaganda shoe begins to pinch, as notice the Glyco-Thymoline case; also the Antikamnia case, in which its manufacturers are already seeking the assistance of the pharmacist to place their advertising calendars in the homes of the pharmacists' patrons.

This would not be such a serious matter as it is were it not for the fact that the physician is at the complete mercy of the proprietary manufacturer who can, and at times does, change the composition of his product as suits his own selfish purpose.

And then the physician naturally must try something else to take its place with probably the same result, and so he is in a constant state of bumping up against a condition in his work which is generally labeled "therapeutic inefficiency."

This at times becomes a serious matter to the patient. If official preparations are brought to the physicians' notice and he prescribes them and becomes acquainted with their virtues, the above deplorable state of affairs will never exist, as the official preparations are **always** uniform.

Physicians Become Progressive.

This will then give the physician a chance to make better progress, as his worries about the quality and uniform-

ity of his medicaments will be a thing of the past; it is well for pharmacists to consider this phase of the situation, as it goes right to the heart of the matter.

CHAPTER XVII.

Attention has already been called to the fact that pharmacists should at every opportunity send a customer (or patient) to the physician for treatment, where the pharmacist would stultify himself, and his profession also, by counterprescribing.

In the course of a year's time many people come into your place of business who are in direst need of a physician's care, but who will ask you for a plaster for backache, for a liniment to rub on the small of the back, for some kidney or bladder cure that you can recommend, or for a relief of some kind that would indicate kidney trouble. Now here is one of your best opportunities to give the doctor a square deal, and incidentally the patient also, and with ultimate profit to yourself.

Opportunities for Real Profit.

While no one will gainsay you the right of selling a plaster when called for, or a liniment or kidney cure either, you know very well that by their questions these customers are seeking information and relief that only a physician can give.

You have, in numerous instances, an opportunity to tell these customers that their kidneys may be in such condition that a neglect of them may be followed by serious consequences.

The abnormal number of chronic diseases with which our population is suffering at the present time, notably rheumatism and kidney disorders, is proof positive that this self-medication with plasters, liniments, kidney cures, etc., does not reach the disease, neither does it cure it. Hence, if you would do these people a real service, persuade them from the foolish and ignorant habit of buying fake medicines if you possibly can, and instead, have them spend it for the physician's serv-

ice and for your specially prepared medicine on prescription.

Then you are doing some real good for suffering humanity; you are doing your best to help the sick one; you are sending him to one who has learned how to cure him, one who has made it a life study to cure disease, and you are a financial gainer in the end at the same time; in fact, you are doing to others as you would that others should do unto you, namely, giving the best you have.

Diverting Custom.

Incidentally, you are taking business, money and profits away from the person who is least entitled to receive it—the nostrum maker—whose deceitful advertising is causing this uninformed customer of yours to ask for the "celebrated" stuff mentioned in the ads.

You are simply doing your share, your duty, in changing the recipient of your customer's money, from one who has no right to it, to one who has educated himself to be the proper party to receive it (viz., the physician and the pharmacist).

In the foregoing instances referred to, it is an easy matter to offer to examine such person's urine and that you will then be able to tell whether or not his kidneys are affected.

Tell him your charge for this is only 50 cents or \$1.00 (as you may decide), and that if you find anything wrong, which needs careful attention, you will write the findings of your examination on paper, with which he can then go to a physician for treatment.

Make your charge as reasonable as possible, never under 50 cents, but make the charge. Few customers will begrudge paying it, although some will not want the examination made.

Neither will they buy the nostrum, but you have accomplished your object; you have set him to thinking your way, and he is ultimately going to go to a physician.

Changing the Nature of Sales Only.

Get away from the idea that you

have lost a customer every time you lose a sale in this manner. You are simply changing a nostrum fiend, who has unconsciously, been educated by lying newspaper advertisements and other deceitful self-medication methods, into a sensible and rational human being.

You lose no customer, neither do you lose any sales; the sales will merely be of a different character and be more profitable to you and more beneficial to the customer.

And how about the physician? When you have sampled him with or advised him of the numerous diuretics or other medicines of the Pharmacopoeia that act directly on the kidneys or on the urinary tract, what a difference it will make to him.

The Physician's Gain.

He is no longer compelled to prescribe a new preparation every few months, only to find it unreliable or replaced by another owing to the detail man's visit. He is now able to prescribe a standard, uniform and palatable preparation that he can rely on, and he knows that he can rely upon it.

He can now give some thought and study to his cases from a different viewpoint than he could formerly, knowing that when he prescribes a certain preparation and beneficial results follow, the same results will always follow in similar instances. A certain worry, the ever-present disagreeable feeling of experimentation with patients, is removed and he feels "a free man," one more fit to fight disease, because his best weapon, therapeutics," has been sharpened to a keen edge.

And the knowledge that you have done something, be it ever so little, to bring this about, will teach you that you are on the right track in your work, and the public will not be slow to notice it, either.

Living Advertisements.

When you have done something to help a person get back his health, through giving him good advice, that person is a living advertisement for you as long as he lives, and its effects

will produce more dollars than will the sale of any line of nostrums or so-called "patents" you ever sold.

This is not only a humanitarian project, but a strictly business proposition of the highest grade as well. The people are here, the sickness and diseases are here, the same as always; you are simply using your prerogative as a pharmacist to supply the medicines that these people need.

This propaganda movement is a huge advertising scheme to bring this about, a scheme to supply the public through the physicians with standard medicines that we may cease to be a nation of nostrum consumers, which in turn makes us a nation having many chronic invalids in our population.

CHAPTER XVIII.

To add another reason to the many of the pressing needs of propaganda work, let us compare a few proprietaries as found on the market today with official preparations.

The highest medical authorities are responsible for the statement that Cod Liver Oil is a food, not a medicine, and that whatever therapeutic virtue may be in it is owing chiefly to its value in furnishing fat to the system.

Freak Standards vs. Legal Standards.

Therefore the proprietary wines, essences, cordials and metabolized preparations of Cod Liver Oil, the so-called "fat-free" preparations containing the so-called "alkaloids" of Cod Liver Oil, are absolutely useless and fraudulent. The virtues of the proprietary emulsions are likewise open to doubt, for an emulsion of Cod Liver Oil soon becomes rancid and deteriorates, and hence the ready-made emulsions on the market are not always fit for use.

Opposed to this class of proprietaries we have the uniform, official, fat-containing, genuine Cod Liver Oil preparations of the U. S. P. and N. F., viz.—two Emulsions in the U. S. P. and five in the N. F., besides the Emulum Phosphaticum, N. F., a most efficient preparation.

These are all made fresh upon pre-

scription and are what the physician wants when he prescribes Cod Liver Oil and the only ones that will do any real good to the patient.

Pharmaceutic Dreams, but Therapeutic Frauds.

Another illustration we have in the numerous preparations on the market called Elixir of Pepsin, Bismuth and Strychnine, each one claiming superiority, but few if any are made with Glycerite of Bismuth, and while some may be nice in a pharmaceutical sense, their therapeutic action is such that few physicians would venture to prescribe them if they knew their true composition.

Opposed to this we have the permanent, palatable and reliable N. F. preparation, Elixir Pepsini, Bismuthi et Strychninae, made from pure Pepsin, Glycerite of Bismuth and Strychnine alkaloid, and without a peer in this class of preparations.

In like manner, case after case could be cited to illustrate the one main dominating trait of all these proprietary preparations, the purely commercial business proposition of producing as many preparations as the pharmacist will stand for or the physician can be induced to prescribe.

No attention seems to be paid to **any** consideration but that of producing as large an output of preparations as possible and at as high a price as is safe, always of course considering the "improved processes," "scientific skill," and the "mysterious mystery" so necessary to their final production.

Juggling with Quality.

Quality necessarily must be sacrificed in direct ratio as quantity and price are increased, at least such has apparently been the result shown by experience.

This juggling with the quality of preparations seems to be a necessary evil in the manufacture of proprietaries, and so we have the various hundreds of different Cascara Sagrada preparations, the Golden Seal frauds, the lying Bromide combinations, the deceitful Formin and Lithium com-

pounds, etc., anything and everything to coin money.

Wolves in Sheep's Clothing.

Pharmacists, opposed to you are a class of shrewd, unprincipled men who stop at nothing to sell goods, who even have the advertising of their wares down to such a clever science, that their so-called clinical excerpts, monographs, brochures, therapeutic notes and medical journals, though based on fraud, often cause the best of pharmacists and physicians to be led astray and believe every word printed thereon.

But it's a long road that has no turning and the educational work that the National Association of Retail Druggists is doing through its various departments in tearing away this mask of deceit and fraud, is becoming more apparent from day to day.

It's a huge undertaking that this fearless giant has set itself to do, but it has every honest and conscientious pharmacist and physician back of it—and that means power.

There will be no let up in the work of this Association in this respect until the pharmacists of our country have been brought to that ideal condition which was intended for them and which is their just due, "Pharmacy for Pharmacists; all others, hands off."

Mention has been made above to the clever advertising used to sell these proprietaries; but this is not all, the very nature of this immense fraudulent traffic enables these manufacturers to hire, at fancy fetching prices, traveling representatives many of whom are graduates of both pharmacy and of medicine, traitors to their profession, lured on by personal gain only.

Meeting a Condition.

As true pharmacists we must realize our individual responsibility to correct the evils that beset us, that we as individuals may become reformed, and thus possibly reform others.

A condition faces you that **must** be met and corrected and you must do your share of work with your physicians.

The condition briefly stated is this: The medical schools, like the schools of pharmacy and all other schools, do not teach everything, their function being primarily to teach you how to study, or in other words, teach you how to apply "school theory" to everyday practical affairs.

As a time must necessarily be set as to the length of school study, many studies are more or less neglected, and unfortunately therapeutics and prescription writing have been two of these neglected ones; but why just these two it may be difficult to state, possibly for the same reason that the practical application of theoretical principles in a business sense are not taught in schools of pharmacy.

However, whatever the reason, the pharmaceutical houses are right there the moment the college door closes behind the student, and are ready and willing to complete his therapeutic education in their way and which you as a true pharmacist know is not the right way.

That is the condition.

Will you help to meet it?

CHAPTER XIX.

The following is the second letter that the N. A. R. D. sent to the physicians of the country one month after the first one:

Dear Doctor:

We are again bringing to your attention three admirable standard preparations which we hope will prove as valuable in your practice as were the three of last month. They will be found on the enclosed folder.

It is our intention to offer you similar information in a series of monthly letters, advocating the open formula and assisting to the best of our ability the work of THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE A. M. A.

Our Association is meeting with excellent results in this campaign of getting back to first principles in medicine, not only because our efforts are in the direction of giving the physician reliable preparations of known composition with which to combat disease, but also because it causes pharmacists to become better acquainted with the physician's needs.

We realize that when there exists no doubt in the physician's mind to the quality and composition of a preparation, he prescribes it with more faith, because the negative factors, unreliability and the possibility of self medication, are entirely removed from the case.

It is for this reason that we are doing our utmost to bring to your attention these standard official preparations—than which there are none better—and we trust you will advise yourself of their sterling worth.

Hoping we will have your valuable support and co-operation in this movement, I am,
Sincerely yours,

THOS. H. POTTS,
Secretary.

P. S.—Should you have mislaid the booklet sent you last month, "Some Important U. S. P. and N. F. Preparations," we will gladly send you another.

The four-page folder which was enclosed with this letter contains the following:

First Page.—"THREE IMPORTANT OFFICIAL PREPARATIONS;" U. S. P. and N. F. stand for uniformity, purity, known composition and a standard strength in MEDICINES;" "Published by the U. S. P. and N. F. Propaganda Department of the National Association of Retail Druggists, 79 Dearborn Street, Chicago."

Second Page.—ELIXIR BUCHU COMPOSITUM, N. F. (Elix. Buchu Comp., N. F.)

This Elixir is a very efficient diuretic and urinary sedative, each teaspoonful dose of which represents Buchu 9 gr., Cubeb 2 gr., Juniper 2 gr., and Uva Ursi 2 gr.

Considering the bad tasting nature of its ingredients, the preparation is a very palatable one, being flavored by means of the official Aromatic Elixir.

It may be combined with certain Potassium or Lithium salts, Hexamethylenamine, etc., and then becomes a much more efficient preparation than any proprietary diuretic on the market.

SYRUPUS PINI STROBI COMPOSITUS, N. F. (Syr. Pini Strob. Comp., N. F.)

Probably no similar preparation of a like nature or of a proprietary character has such effective sedative expectorant properties as this compound Syrup of White Pine and it has a very pleasant taste, also.

Each teaspoonful dose contains 5 gr. each of White Pine and Cherry barks, 2-5 gr. Sassafras bark, 3-8 gr. Spikenard root, 1-2 gr. Sanguinaria root, 3-5 gr. Balm of Gilead, 1-32 gr. Morphine sulphate and 1-3 minim Chloroform.

Such salts as Ammonium Chloride, Ammonium Bromide and other Chlorides and Bromides are compatible with this syrup.

Third Page.—LIQUOR ANTISEPTICUS ALKALINUS, N. F. (Liq. Antiseptic Alk., N. F.)

This is an ideal alkaline antiseptic and deodorant, of a purplish red color, and with a pleasant odor and taste.

It may be used full strength, or in 20 per cent to 50 per cent warm, aqueous solution, and is NOT compatible with acids.

It contains, in aqueous solution, 25 per cent Glycerin, 3 1-5 per cent each of Potassium Bicarbonate and Sodium Benzoate, 4-5 per cent Sodium Borate, small quantities of Thymol, Eucalyptol, the Oils of Peppermint and Wintergreen, 6 per cent Alcohol, and colored with Cudbear.

This preparation is incompatible with Peroxide of Hydrogen (Aqua Hydrogenii dioxidi, U. S. P.), but used alternately with it as a gargle, is highly recommended by medical authorities in catarrhal conditions.

The formulas for these three preparations of the N. F. are the result of painstaking and careful work of some of our most eminent physicians and pharmacists, and the only consideration thought of in evolving them was to provide the physician with the best preparation possible. They are authoritative official standards and always of uniform composition.

Preparations more or less similar to these N. F. preparations are exploited to physicians by various companies, etc., under fanciful names.

In most cases they are also exploited to the laity, always accompanied with literature urging self-medication.

Fourth Page.—FREAK STANDARDS as compared with LEGAL STANDARDS. While PROPRIETARIES are of unknown composition and

are subject to change at any time without either the physician or the pharmacist becoming aware of the fact, the OFFICIAL PREPARATIONS of the United States Pharmacopoeia and the National Formulary are a LEGAL STANDARD and cannot be changed or deviated from in regard to composition and quality.

Become perfectly familiar with these three preparations, for they will be in constant demand and physicians will have numerous occasions to prescribe them.

The many fraudulent Diuretics and Kidney Cures, proprietary White Pine and other cough preparations, and the numerous 'secret fancy-named nostrums parading as Alkaline Antiseptics, constitute almost one-tenth of the entire list of proprietary specialties.

Hence if intelligent sampling and propaganda work is done with your physicians on these three preparations, you can readily see that a big hole will be cut in the proprietary fortress.

You not only have in the foregoing, three elegant pharmaceuticals, but they are also therapeutically very efficient and with the use of which your physicians will be very much pleased.

CHAPTER XX.

The most important thing to be done after your preparations are finished is to dress the two or three-ounce samples neatly.

The preparations must all look clear (careful attention to filtering will even make them brilliant), the bottles perfectly clean and shining bright, and a cap on the cork.

Do the work well—it is worth while. Just think of it, Liquor Antisepticus Alkalinus, N. F., the best preparation of its kind in the physician's materia medica, costing only 18c per pint!

The manufacturer charges you 40c per pint and over, and the various proprietaries somewhat similar to it, parading under fancy names (as Glyco-Thymoline, Thymo-Borine, Thymo-Glycoline, Borol, etc.), cost all the way from 53c to 75c per pint.

Embryo Patent Medicines.

These so-called ethical preparations, after the physician is good and sick of them, are then exploited to the laity, as common cure-alls and simple patent

medicines, good for everything and anything; and generally belonging to the overpriced class at that. Don't you think, Mr. Pharmacist, that it is to your credit to begin hard and intelligent work right now to stop the further manufacture of these embryo fake medicines by getting busy along propaganda lines?

You will never do yourself a more important turn in a financial sense, nor pharmacy a greater good, nor yet will you be able to ever do the public a greater humanitarian act.

Become familiar with the more important antiseptics in order that you may be able to answer intelligently the questions physicians may ask you.

Your Strong Point.

Your strong point is that the Pharmacopoeia and the National Formulary containing some one thousand five hundred drugs and preparations equip the physician with everything desirable in the healing art.

Additional antiseptics we have in the Compound Solution of Cresol, Compound Resorcin Ointment, Hydrogen Peroxide and Solution of Formaldehyde, all official.

Hydrogen Peroxide is especially valuable in connection with the Alkaline Antiseptic, as it brings to many physicians the new information that when these two preparations are used alternately, for instance as a gargle in certain catarrhal conditions as recommended by some medical authorities, a most effective therapeutic agent is provided.

The more important expectorant preparations of the U. S. P. and N. F. should also be studied. Your sample of White Pine Compound, fortified with your knowledge of these, leaves very little to be desired as far as expectorants are concerned.

However, if opportunity is given, the Syrup of Codeine and Syrup of Lactucarium might be mentioned as still further specific instances of how well the official text books have supplied the medical man.

The price of manufacture of your Syrup of White Pine Compound, \$1.25

per gallon, certainly compares very favorably with what you pay when buying it, as high as \$2.88 per gallon being charged by some sellers, but this alone is not the question.

What do you **get** when you buy it and can you say to your physician "here is an N. F. Syrupus Pini Strobi Compositus, made exactly right?" Can you? Dare you? Of course not.

Timely Warning.

Here again you have the embryo patent medicines, to worry you in later years, as the "patents" today are doing, wrapped in lovely literature for the benefit of the public that they may prescribe for themselves such wonderful things as Cough Sedatives, Coccilana Compounds, Heroterpins, Cherry-Hero, Eucalyptine, etc., present prices of which run up as high in some instances as \$11.00 a gallon. Mr. Pharmacist, what are you doing to hinder the advancement or the encroachment of this new patent medicine evil? There is one thing you can do and that is to become active along propaganda lines immediately and kill it in its infancy. Help the N. A. R. D. in its valiant fight to purify pharmacy and thereby help yourself.

The Compound Elixir of Buchu has much to commend it to the physician, and very little has been done to stop the onward march of hundreds of fraudulent proprietaries that are recommended for all sorts of kidney and bladder diseases.

"Drug Nihilism" is Vanishing.

The real physician is just now passing out of the "age" of drug annihilation and is realizing the need for a better understanding of the knowledge of drugs (pharmacology); this will prevent doubt of their efficient action.

In this Elixir of Buchu Compound the physician is coming back to first principles in medicine; various potassium salts as the acetate and citrate may be added to it for their refrigerant diuretic action; the various Lithium salts are also desirable additions.

Hexamethylenamine is a very valuable urinary antiseptic and diuretic, and makes a valuable addition to this

Elixir; however, it should always be stated that Hexamethylenamine should not be prescribed with acid nor alkaline mixtures, with which it is incompatible.

Other valuable diuretic preparations which may interest the physician at the present time are the two Copaiba mixtures of the N. F., the Infusion of Digitalis, the Emulsion of Oil of Turpentine, and the various Potassium Acetate Elixirs of the N. F.

Compare the price of this Compound Elixir of Buchu, 35c per pint, with the unwarranted prices of the numerous "gouty" nostrums, such as Tongaline, Uriseptin, Sorghum Compounds, etc., and then ask yourself whether or not propaganda work is liable to pay you cash returns.

Why Pharmacists Should Awake.

The tendency of many physicians and the general trend of public opinion seems to be to reduce **all** pharmacists to the level of the least qualified druggist engaged in the business, and it therefore becomes the duty of every pharmacist and especially of those engaged in the educational propaganda, to counteract this tendency by educating themselves along scientific and especially ethical lines.

To speak plainer, learn your business well; your profession better, and be honest.

It will be a matter of **self-preservation** for you to do this, for it makes no difference how much an ignorant pharmacist may rebel at learning anything new, **no one** can blame a physician if he sends his prescriptions for U. S. P. and N. F. preparations to a pharmacist whom he **knows** can put them up correctly.

And that's just exactly what we are coming to; the physician has been fooled long enough, goodness knows, and he will be very particular as to who puts up **his** prescriptions, now that he knows what he is prescribing.

It behooves pharmacists therefore to note the handwriting on the wall, for when a physician begins to specify, "U. S. P. and N. F." on prescriptions, he will also be tempted to specify "an ethical pharmacist."

CHAPTER XXI.

There is apparently no limit to the number of new organic compounds that our present-day "financial chemists" are able to produce with the various elements, as iron, mercury, iodine, etc.

Far be it from us to put a damper on legitimate chemical research or on real scientific inventions, but it seems rather strange that these "new discoveries" are always so scientifically combined as to allow their use for almost any conceivable disease.

The Propaganda Educational.

It is refreshing therefore to note that physicians, realizing the educational functions of this vast propaganda movement, are beginning to discover that "secret medicines," commonly called proprietaries, are in reality nothing but common drugs, skillfully concealed, expensive for the patient and profitable only to the originators.

These manufacturers, generally rascals, (in a therapeutic sense,) are constantly aiming to produce some new form or method of concealing drugs, well knowing the gullibility of the average professional man, and naturally the quality or real value of the manufactured "new remedy" becomes a matter of secondary importance.

It seems therefore that this general educational propaganda is just in time to check this abnormal increase of mysterious remedies and to save the professional status of medicine and pharmacy from ignominy and shame. It is a matter of record how "albuminoids," "proteids," "nucleinates," "peptonoids," etc., have been advertised of late years, and it seems that the sheer multiplication of this class of remedies (?) and absurd claims of their value, is going to prove their speedy downfall and obliteration.

Opening Physicians' Eyes.

First principles in medicine, as advocated at present, is opening physicians' eyes and causing them to ponder in this mad rush for "new discoveries," which are generally worthless and only to be replaced in due course by other equally worthless preparations.

As an example, we have the new organic iodine compounds labelled "iodalbate," "iodnucleinate," "organic iodine," and other equally unscientific terms and useless compounds.

There is not one of this whole class of proprietaries that has the therapeutic value of the official *Liquor Iodi Compositus* of the U. S. P., commonly called "Lugol's Solution," a preparation containing 5 per cent of free Iodine and 10 per cent of Potassium Iodide.

When this most excellent preparation is taken with milk or eggs, the resulting combination is much more effective and far more economical than any of the so-called organic compounds of Iodine, and its disagreeable styptic taste is also much modified by this method of taking and can be completely overcome by the addition of sweetening and flavoring ingredients.

"Originality" for Fake Products.

What is especially galling to the professional man, be he physician or pharmacist, especially such as have been instrumental in producing the *Pharmacopoeia* and *National Formulary*, is to have these "would-be-benefactors" bob up every now and then and claim "originality" for their products and class the official preparations as imitations.

These new organic compounds doubtless are often "original" but just as often they are original fakes in a criminal way for the purpose of blinding the users and enriching the makers.

A question that many physicians ask of pharmacists is "how can I write a prescription for a mixture that will contain the same drugs, in the same proportion, be as palatable and agree with the stomach as a certain proprietary?"

This is certainly plain speaking and we will endeavor to speak just as plain.

If the pharmacist and the physician will get together and are anxious to co-operate, which they evidently are, it is an easy matter to have the physician realize that he must be willing to do some experimenting or studying.

Experimenting with Proprietaries.

He has done much, very much experimenting with proprietaries for

many years and knows very little about them, having jumped from one to the other as detail man after detail man brought arguments to bear.

However, such physicians are made of the right kind of stuff—they are willing to be shown and your co-operation becomes a duty.

There is one great drawback to an intelligent answer of the above general question and that is, if a pharmacist or physician attempts to duplicate a proprietary preparation from the formula on the bottle, he is going to be disappointed as a general thing.

Why?

Because these preparations as a rule are not true to their formula, or the formulas are misleading in that they often state that a certain ingredient is present, and this represents so and so much drug.

For instance, we will suppose that a certain proprietary actually contains Dandelion, Gentian, Cinchona and Aromatics; how are you going to prove as incorrect what their label states: "This scientific preparation represents the modern research of the most famous clinicians, eminent botanists and successful surgeons and contain the following efficient drugs: *Smilax pubescens*, *Taraxacum dens-leonis*, *Panax chinensis*, *Solidago aureum* and *Zargozinski androscoggini*."

Funny, if not Serious.

This wonderful humbuggery would be very funny if it were not also truly serious, in that these manufacturers are endeavoring to supplant the entire materia medica with their mysterious concoctions, and in some cases have even succeeded in doing so.

Again, a preparation is stated to contain: Quinine, representing 30 grains Cinchona bark; a superficial reading would cause the physician to think that Cinchona bark is just what he wanted.

Now this statement is a false one, because Quinine does not represent Cinchona bark, it is simply one of its numerous constituents; and so with all others.

The object of all this beating around the bush, use of misleading statements and twisting of the truth is to make it

impossible for the pharmacist to prepare the preparation.

House No. 2 now becomes jealous of the preparation put out by House No. 1 and puts out an "improved" one, of course under another fanciful name; and thus in a short time all these manufacturers have fancy named Viburnum Compound, Aletris Compound, Cough Syrup, etc.

The Only Proper Way.

Therefore the only proper way for a physician and a pharmacist to experiment with new preparations is to first find out what drugs are needed and then combine them with the various aromatic spices into a palatable mixture that is acceptable and agreeable to the stomach.

If this line of experimentation is faithfully carried out, definite results will soon be reached, as the official aromatic spices, essential oils, sugar, glycerin, etc., leave nothing to be desired as regards rendering a preparation agreeable in every possible way.

CHAPTER XXII.

Get together meetings are the order of the day. Co-operation of this kind has been effectively preached for some time in various associations and we are glad to note, with most excellent results.

Much has been done in numerous ways of late to foster a more harmonious feeling between the members of our two sister professions, medicine and pharmacy, and the results are not lacking, though often obscured or remote.

Individual effort has its effects, and open and above board as physicians and pharmacists are now co-operatively working, a gradual change for the better is coming over both professions.

A Power in Get-Together Meetings.

But valuable as is individual effort and necessary also, there is nothing like a get-together meeting of physicians and pharmacists to spread the gospel of "back to first principles in medicine."

There are few towns, hamlets or cit-

ies in our great country, having four or more professional representatives of medicine and pharmacy, that cannot have a successful get-together meeting at regular stated intervals, either annually, semi-annually, quarterly or monthly.

It acts like magic, like wild-fire, and as the cause is so very just and humane, its effects are lasting—not in the nature of a boom. The physicians have had their experience with this new fad, proprietaries; the remedies have been found wanting as far as “medicine value” is concerned, and the advanced step—“back to first principles”—is the order of the day.

The pharmacist's opportunity has come at a most favorable time, but it must be taken advantage of without unnecessary delay, to free himself from this bondage of “ready to take” nostrums and to assert his title of “Master of Pharmacy.”

Action Necessary.

We would therefore urge upon the secretary and president of every local association of druggists, who have not already done so, to at once become active in planning for such a get-together meeting.

In cities and towns having no association, any real live pharmacist can quickly obtain the necessary co-operation from his brother druggists to plan such a meeting, and the experience itself is well worth every cent it costs.

Make your invitations to these affairs enthusiastic and paint in glowing terms the objects you are **going to** (not attempting to) accomplish. You can accomplish twice as much as you promise; you will accomplish it much sooner than you expect; so be not afraid of extravagant terms.

The physicians are with you, are waiting for you, and all you have to do is to start the ball a-rolling, and when once started you will have to hustle to keep up with the good times and speed resulting from your efforts.

Timely Warning.

If you have been a good reader of recent literature on this all-important subject you will have anticipated

these results, but owing to lack of energy and initiative, you have allowed the matter to go by unnoticed—by default, as the lawyers have it. Let this therefore be a warning notice to you to **awake**, move forward, keep up with the procession, and to get the benefits of the better times a-coming, for your help is needed.

While it is true that all medicines are as yet not in the proprietary class, a few years more of this inexcusable inactivity on the part of the retail pharmacist would have brought a most lamentable state of affairs.

You must learn to act for yourself, through your association, for no jobber, proprietor or manufacturer is liable to assist you in meeting your problems, their interests and ambitions lying in entirely different directions.

Your association is a power and all these local associations combined as the N. A. R. D. or other associations of pharmacists, is an irresistible power of almost unlimited strength, and it is being used for your sole benefit.

In February, 1909, the N. A. R. D., single-handed and alone, defeated the experimental parcels post amendment of the Post Office Appropriation Bill. Does that not speak volumes to you of the good of organized effort?

Is not the question, “how can I be of value to an association like the N. A. R. D.,” worth some time, thought, study and financial assistance on your part, when it can accomplish almost any reforms it attempts with your help? Surely, it is.

Magnificent, Monster Illustrations.

The value of a get-together meeting is infinitely greater than its most ardent promoters dare hope for, both as regards fraternal and financial results.

As an example, just consider the moral or fraternal effect the annual get-together meeting must have upon the profession of pharmacy and medicine in Philadelphia; realize, if you can, the magnificent result of the Chicago get-together meeting, which is causing 1,000 pharmacists and 2,500 physicians to work hand in hand to “get back to first principles in medicine.”

What can be accomplished on a large scale in large cities can even more easily be accomplished in smaller cities, if only the "object of the movement" is considered in the result.

Other Illustrations.

At a recent get-together meeting of the Lynn (Mass.) D. A., a most novel object lesson was taught, bringing forcibly to the minds of all present the existing conditions.

Three tables were prepared, upon one of which was displayed a goodly number of standard U. S. P. and N. F. preparations, and by their side were shown the somewhat similar proprietary preparations.

A second table, the most interesting one, contained a very complete assortment of such "typical" patent medicines as have an every-day demand upon the public, and which had been introduced by and through the physician, and it was so placarded. It illustrated as probably no other method could, the reactionary results of prescribing proprietaries. To this class belong such recent novelties as Listerine, Antikamnia, Glyco Thymoline, etc.

The third table contained neat samples of all the principal vehicles of the U. S. P. and N. F.

As this meeting is typical of many we will further say that after several papers read by pharmacists and physicians upon subjects as "The Druggist's Viewpoint," "Vehicles of U. S. P. and N. F.," "The Druggist's Influence Over the Public and How It Can Be Used to Help the Physician," a general discussion followed, participated in largely by the physicians.

The meeting, the first of its kind held by the Lynn Association, brought out the fact that the physicians were intensely interested in all that was being done and suggested further meetings of a similar nature.

It further demonstrated the fact that more actual good grows out of a get-together meeting, followed up by regular propaganda work, than all other efforts together.

Such a meeting is an entering wedge

that makes subsequent work easy and effective.

CHAPTER XXIII.

The manner in which physicians are being sampled at the present time is certainly proof that propaganda is a very live issue and that the American pharmacist is awake to his opportunities and not the "poor business man" he has been credited with being.

That the propaganda for U. S. P. and N. F. preparations is productive of actual and visible results is already abundantly proven by the work done, showing tangible results in the prescription files of pharmacists in every state and by the words and letters of commendation from physicians.

That the N. A. R. D. should work overtime in such a movement is but natural and logical when the history of this great organization is considered, but no over-time work was ever done with more genuine enthusiasm than is this.

Third Letter to Physicians.

The following is a rough draft of the third letter that was mailed to all physicians:

Dear Doctor:

Inasmuch as the general results of our two previous efforts are most satisfactory, it is with great pleasure that we again come to you with three very important preparations. They will be found described in the enclosed folder.

We anticipated this gratifying state of affairs would manifest itself from the fact that physicians can appreciate the knowledge of prescribing preparations of exact and known composition and that they would give this work of ours their hearty co-operation.

Our campaign is more far-reaching in its effects than a first glance would indicate. In addition to calling your attention to the official preparations, we are advising against the unjust practice of counter-prescribing by doing effective work with our own members.

It should be understood that the members of our Association are pharmacists qualified to properly fill your prescriptions. The preparations we are bringing to your attention each month are, we believe, proof positive that such is the case; preparations that are at once pleasing to the eye, palatable and therapeutically active.

We will adhere strictly to these principles, believing they will call forth a hearty responsive, and we earnestly request your co-operation.

Thanking you for the courtesy of a kind consideration of the enclosed folder, I am

Sincerely yours,

THOS. H. POTTS, Secretary.

There are still some pharmacists who have not taken advantage of the benefits propaganda offers, and to these we would say—Hustle. The

preparations offered to physicians in the literature going out from National Headquarters are seasonable.

The folder accompanying this March letter contained practically the following subject matter:

Page 1.—Title page: "The Issue of the Day."

Page 2.—Contains the nature, dosage and qualifications of the official AROMATIC FLUIDEXTRACT OF CASCARA SAGRADA, the advantages it possesses over many other laxatives in not readily losing its effects when frequently taken, and as its uniformity can be relied on, it removes one of the greatest handicaps in a physician's practice.

A good word is also spoken for the simple fluid-extract of Cascara Sagrada and how its bitter taste can be quite effectively disguised by prescribing it in combination with equal parts of Glycerin and Compound Fluidextract of Sarsaparilla.

Page 3.—Describes the satisfactory method of exhibiting iron in the form of PILULAE FERRI CARBONATIS, U. S. P. Its contents, dosage, from what made, and that it is always made fresh. States that it is an efficient chalybeate tonic and hematinic; that the report of the U. S. Porto Rican Commission (see A. M. A. JOURNAL, Oct. 7, 1905, page 1066), and other clinical reports, describe this pill as a hematinic SUPERIOR to any other iron preparation.

Ready-made pills are unsatisfactory and often entirely inert. This form of iron is far more effective and much more economical than the secret nostrums parading as organic compounds of iron.

Page 4 and 5.—Describe EMULSUM PHOSPHATICUM, N. F., its alternative and nutrient action, fresh preparation and dosage. A very satisfactory preparation for patients who at first have difficulty in taking Cod Liver Oil. One paragraph also refers to the official Emulsion of Cod Liver Oil, and Page 5 tells about the useless Cod Liver Oil nostrums on the market as stated in NOTES of February 4, page 9; and the following paragraph:

"The newer forms of proprietary emulsions, having petroleum as a base, are wholly devoid of nutrient properties, being mineral oils."

Page 6.—Contains six short paragraphs on Self-Medication; How It Starts, How It Works, How It Ends, and The Remedy.

Page 7.—Contains three short paragraphs on the Sincerity of Purpose in which the N. A. R. D. is working with its members in educating them away from the habit of counter-prescribing when it would be unjust to the physician.

This Association stands for the best there is in pharmacy, and its members, recognizing the present value of the best, conscientiously ask for themselves a square deal on the basis of honest service rendered.

Page 8.—Contains a short display paragraph stating that the U. S. P. and N. F. contain 1500 drugs and preparations, representing all or nearly all the remedies with which to combat every known form of disease, etc.

This 8-page folder is artistically gotten up and will no doubt be greatly prized for its contents by every physician receiving it.

CHAPTER XXIV.

The importance of being familiar with such official preparations as are in any way related to the three with which you will sample your physicians in March, should not be underestimated.

There may be some objection to the

use of the preparation you are sampling him with, and another one may suit his needs exactly; in this connection it may be well to state that no effective propaganda work can be accomplished unless you have a copy of the United States Pharmacopœia and the National Formulary. You can then readily pick out such preparations as are closely related in therapeutic activity to the sample you are exploiting, and this assists the physician wonderfully.

A Good Scheme.

An effective scheme can be worked having this object in view, namely, to furnish the physician with a list of these allied and related preparations, preferably typewritten, which he can look over at his leisure. Related to the Aromatic Fluidextract of Cascara Sagrada, for instance, we have the plain Fluidextract of this drug, which many physicians really will prefer to the aromatic, and also the Powdered Extract, which has four times the strength of the bark.

If a preference should be expressed for inorganic cathartics, the Solution of Magnesium Citrate and the Compound Solution of Sodium Phosphate are reliable and effective, as are also the official Seidlitz Powders, the artificial Carlsbad Salt of the National Formulary and the various effervescent salts of a laxative nature.

The many pills having cathartic action in both the U. S. P. and N. F., furnish you with excellent formulae and a large choice, and the numerous preparations of those well known drugs, Senna, Rhubarb, Jalap and Aloes should be the means of making your sampling work easy and pleasant.

Serves a Double Purpose.

Sampling in this manner has a twofold purpose; it familiarizes the physician with quite a number of the official preparations in a manner that he can readily grasp, and again, he realizes what he did not before, that you are thoroughly conversant with your duties and a safe man.

Such a physician is going to remem-

ber you when occasion arises, which, by the way, is very liable to be rather frequently as propaganda work advances.

One thing both you and the physician will notice in regard to your own make Aromatic Cascara Sagrada, is that it is a somewhat "thinner" liquid than most preparations of this class on the market.

The only explanation you can offer to this is that your preparation is made strictly according to the Pharmacopœia, and hence contains no thickening or sweetening agent to give extra body, such as, for instance, Extract of Licorice would give.

Food Medicines.

The preparations closely allied to the Phosphatic Emulsion are primarily the various emulsions of Cod Liver Oil and their modifications. And if we consider this Oil in the nature of a food as we should, these preparations are in a class by themselves.

Should the conversation lead you into the subject of General Tonics, the Hypophosphites and Phosphorus offer several reliable preparations that are worth mentioning, and this will eventually lead up to a discussion of your third sample, Bland's Pills.

A Powerful Argument.

In this pill you will have a very good subject upon which to dilate, as all advanced medical men are satisfied that this is one, if not the only, excellent method of administering iron.

You must lay stress upon the fact that this pill should always be made fresh and that he should so specify upon his prescriptions, as in no other way can he be certain of getting real Ferrous Carbonate.

This Ferrous Carbonate is formed in the making of the pill and is readily oxidized in a short time, and as the pill owes all its therapeutic activity to Ferrous Carbonate, the imperative necessity of a freshly made pill is made manifest.

For this reason, ready made pills must generally be unsatisfactory, and as a rule are very often entirely inert.

Another Forceful Pointer.

When the physician is thoroughly satisfied as to the point you are making and sees the logic of your reasoning, then is a good opportunity to begin a mild attack on all coated ready-made pills in general and put in a good word for the administration of drugs in the form of capsules.

This allows the physician to vary his formula and assures him of a preparation that is fresh, and enclosing it in gelatin capsules answers just as well as if they were coated by dipping in gelatin.

In this way both powders and pills made from mass may be dispensed and also small doses of fixed and volatile oils.

Pills as ordinarily found on the market, especially such as are made by compression and which includes tablets, are a very uncertain form of medication.

The chance of imperfect disintegration is always present, causing uncertainty of action; this is entirely done away with when the medicine is directed to be enclosed in a capsule, either as powder or mass.

For the sake of the information it may be worth while to mention the fact that most chemical substances should **not** be ordered in mass form, as they are liable to form hard, insoluble masses; these substances should be enclosed in the capsule in powder form, or dispensed as powders.

This line of argument will have a natural and growing tendency to restore to the pharmacist much of his prescription business on a profitable basis, whereas the profits now go to the coffers of the ready-made pill and tablet kings.

The good of the argument is all on your side, therefore it will pay you handsomely to put your physicians in full possession of the facts.

CHAPTER XXV.

Under date of Washington's Birthday (February 22), 1909, a letter was sent out to physicians, presumably to all physicians in the United States, by

a certain pharmaceutical manufacturing house.

The communication is simply in the nature of a statement of a proprietary house stating its side of a proposition as an excuse for existence in a plain, and to them, business-like manner; we will endeavor to state the case of the retail pharmacist in the same plain, and to us, business-like manner, and his side of an excuse for existence.

What Is Education?

The letter begins: "Dear Doctor:—A great deal of time, money and energy is being spent in a campaign intended to educate (?) physicians as to the impropriety of prescribing other than U. S. P. or N. F. preparations. One argument advanced is the large profits which physicians are turning into the pockets of proprietary manufacturers. Leaving out of consideration the proprietaries advertised direct to the public, and which, of course, are not prescribed, how many proprietary manufacturers are really amassing large fortunes—larger than in any of the other ordinary lines of industry where brains and energy count?"

The retail pharmacist of to-day is certainly elated over the turn affairs pharmaceutical have taken of late, having finally been able to see for himself that the physician's pharmacological and therapeutical education, as admitted by the physicians themselves, has been somewhat neglected in the medical colleges.

Of course it is only passing strange that nearly all proprietary manufacturers have spent hundreds of thousands of dollars during the past twenty years to educate (?) physicians and medical students to the use of their scientific (?) specialties and to their way of thinking, this, of course, is only an incident in their career.

Special Use of a Word.

The firm in question evidently uses the word educate in a general way, not intending to create the impression that the pharmacist is going to educate the physician. No pharmacist would undertake that, still if he fur-

nishes the physician with information that teaches the physician something valuable, we don't think a physician would object to being "educated" in that manner.

We are none of us perfect, nothing human is perfect, and we all have much to learn, pharmacists included, and physicians and pharmaceutical manufacturers as well.

If this information of the pharmacist should happen to be an official preparation's merits, which the physician himself discovers to be superior to **any** proprietary, we don't see that the physician would or could consider it a breach of etiquette, even if plainly told in so many words that the use of the proprietary preparation was unsuitable.

The point in the argument about profits may be well taken, but whether "brains and energy" count will depend upon the future—the brains and energy of the proprietary makers against the brains and energy of the retail pharmacist who makes only standard, official and authoritative preparations.

Most of the arguments advanced by pharmacists appear to deal with the quality, strength and composition of the official preparations and their legal status, necessitating uniformity.

Begging the Question.

The letter continues: "And if you prescribe a U. S. P. or N. F. preparation, have you an assurance that, quantity for quantity, it will cost your patient less than a proprietary would cost?"

This is begging the question, but the prescription files of pharmacists really do give the physicians that assurance, and in a manner that leaves no room for doubt.

Continuing further, this letter states: "Will the prescription-filled remedy excel the proprietary in pharmaceutical elegance? Will it contain better or purer drugs? If not, where then are **you** to be benefited, or **your** patient?"

The cat appears to be out of the bag at last, pharmaceutical elegance; this usually appears as a strong argument

in favor of most proprietaries, and while generally other qualifications are only supplementary to pharmaceutical elegance in proprietaries, it seems to us that a retail pharmacist considers therapeutic excellence first and still is able to prepare a presentable preparation.

In a Glass House.

While it is admitted that retail pharmacists are not all first-class and scientifically skilled men, we have abundant and reliable proof that most all of the so-called "best" pharmaceutical manufacturing houses use ways and means not at all in harmony with good pharmacy, nor do all of them always operate in the straight and narrow way, any more than do all pharmacists.

It seems to us at this distance that the letter is very much of a begging one, too many questions; "will it contain better or purer drugs?" All the literature of pharmacists that has come to our notice has only spoken of standard drugs, and that is the only kind the official preparations need contain.

The physician is benefited therefore because he can rely upon the kind and quality of the preparations prescribed, as they must conform to a legal standard, which the secret nostrums need not as they have no such standard; for this reason and also because of the reduction in price the patient is benefited by receiving U. S. P. and N. F. preparations.

Is this a Slur on the U. S. P. and N. F.?

Again the letter says: "And how many of the present-time official preparations were former-time proprietary specialties?"

Some of our best pharmaceutical houses will at times employ twisted statements to gain their ends. We challenge any proprietary house to mention one instance where they have originated a U. S. P. or N. F. formula.

The files of American and foreign drug journals, the discussions in association meetings, the volumes of the A. Ph. A., the numerous text books on pharmacy and allied sciences, bear

mute but eloquent evidence as to the origin of every official preparation, and lo! the names of nostrum makers and nostrums do not appear.

If the truth about these secret specialties were published we should find the origin of probably every one to be the favorite prescription of some physician that the pharmaceutical house had procured in some way or other.

Possibly, however, the letter only means to "create the impression" of "originality" without exactly saying so, as it really does not say what these preparations were **before** they were proprietary specialties.

The letter continues: "Has not, therefore, the manufacturer of ethical and ethically-pushed proprietaries, with resources enabling him to place his products freely before the physicians of even the remotest districts, a proper place in the pharmaceutical world?"

He certainly has, and no one will say him nay, nor is doing so. The retail druggist is simply going to exercise his prerogative as a pharmacist in furthering his calling in an honest way and is asking no odds of any one.

He will fight this nostrum evil on its merits, if it has any, and boldly says, "May the best man win."

CHAPTER XXVI.

The result of the first two months of propaganda work of the N. A. R. D. shows conclusively that the retail pharmacists of the United States are thoroughly awake and alive to their opportunities.

The get-together meetings are producing an added and necessary stimulant to the work and the activity of local associations is remarkable, but the work is worth all it costs and more.

Not only is the specification, "U. S. P." or "N. F.," noted in a largely increasing number of cases and the number of prescriptions on the increase in localities where active sampling work is being done by the pharmacist, but this work has actually caused dispensing doctors to become prescribers. We were optimistic enough to suppose

that such would be the case, but hardly expected it would occur so soon.

There is nothing so stimulating to business as a healthy optimism, and no retail branch of any business can work optimism into a successful business with as much success as can the retail pharmacist.

The pages of NOTES have given at times, when space permitted, results of propaganda work in various localities, and is only mentioned in order that those pharmacists who are rather doubtful of the plan can assure themselves that it actually is both a business-getter and a profit-getter.

The cost is so little and the efforts really so trifling that no pharmacist who understands his duty to his own family, his physicians, his profession and to the public at large, can afford to neglect so favorable an opportunity to secure for himself a solid and life-long footing in his community.

A Remedy for Dispensing by Physicians.

In this connection we would like to give a little advice to such pharmacists who are in direct competition with dispensing doctors, that the condition of both may be materially benefited.

No entering into details is necessary as regards why dispensing is carried on, etc., but a remedy is suggested.

If no other way is possible for you to visit the dispensing doctor, put on your Sunday-go-to-meeting clothes, lock your door, put a sign on it as to where you can be found and go to his office.

The seriousness of the occasion must give you strength and bravery to fight out your principles, to state your case clearly and so thoroughly that victory of some kind, if only 1 per cent, will be yours.

The Status of the Professions.

While words to suit the occasion are necessarily your own, the facts that you are bringing to your physician are these: Doctor, you are selling medicine and I am selling medicine, and because we both are very blind to actual conditions, 90 per cent of the people in

our community are sending the money for their real and fancied ills to outside parties.

This may be a strong one for him to see, but you explain further: This 90 per cent of our population comes to my drug store and buys patent medicine to cure or attempt to cure their own ailments, and the result is that you receive nothing more from them, except where these nostrums might sometimes make people deathly sick.

I, myself, receive really nothing substantial, for the profits on this class of goods, while ranging from 30c to 40c on the dollar, are really very little above my running expenses.

These people do not become disappointed when a patent medicine does not help them, but they try the next one, and still another, and all the new ones, always assuring themselves that it is "cheaper than going to the doctor."

A Chronic Evil.

With many it has become a chronic evil to buy, month after month and year after year, the medicines from the peddlers, who visit them at regular intervals.

Of late a new foe has come into existence in the form of the newspaper prescription nostrum and it has its victims by the hundreds.

Difficulties To Be Overcome.

Now, doctor, it seems to me that it is clearly up to us to get busy and let the public know that most all chronically diseased people are such because of their self-medication habits, and that in the long run they would be money ahead by refusing to take the nostrum and by visiting the physician instead.

This not only would be a direct financial and professional benefit to you, but to me also, and it would keep the money in town.

Where there is a will there will be found a way, and as the result will be beneficial to all parties concerned, some plan must be adopted to carry out the idea.

Reciprocity.

While we cannot overthrow the whole nostrum-making system in one month, we must constantly work towards that end. I will do what I

can to send patients to you, using my best arguments and reasons for doing so, if you will reciprocate by prescribing for them and letting me put up the prescriptions. This plan, I think, will help both of us and the people will be the better off for it.

Doctor, I not only feel that it will materially improve our financial status, but I feel that the time is here when it is our duty to do so—our duty to the public—and while the public may, at first object for various reasons, we must find a way to overcome all objections.

I will do what I can in my newspaper and other advertising to not only discourage the purchase of nostrums, but will at the same time give reasons as to why physicians should be consulted in cases of illness.

I believe, doctor, if we work in harmony we can do anything we start out to do and be well repaid for our efforts.

Gaining Independence.

If pharmacists would realize their own power to gain independence by their own efforts, we would have no complaining ones.

Look at the successful merchants in your community and realize that it was caused by hustling after business and being at peace and in harmony with as many people as possible, and then go and do likewise.

CHAPTER XXVII.

The N. A. R. D. is making propaganda history as it was never made before. The third letter has been sent out with its message of good cheer and with its mission of banishing secrecy in medicine.

That it will accomplish its object the same as its two predecessors there is no doubt—and we also have proof that this work is bringing more U. S. P. and N. F. prescriptions to pharmacists than they have ever received before.

We are glad of this, not only because of the material aid it is giving to physicians, or the benefit it is bringing to the public, but because of the great good it is doing the pharmacist in giving him

something to live for and also something to live with.

Our Fourth Letter to Physicians.

The following is a rough draft of the fourth letter that will be mailed to all physicians, April 23, 1909:

Dear Doctor—

We take pleasure in again bringing to your attention three valuable and seasonable preparations of the U. S. P. and N. F. A description of them as regards composition, dose, uses, etc., will be found on the enclosed folder.

We feel that you will appreciate the information that this little folder brings to you, giving as it does, an honest statement of well known facts for your consideration.

One pleasant feature of this propaganda campaign is that the physicians are almost unanimously agreed as to the desirability of the open formula in opposition to the secret preparation.

Another important point in connection with the prescribing of any official U. S. P. or N. F. preparation is that no dangerous or harmful drugs are contained therein without the prescriber's knowledge.

We would also impress upon you the information that these preparations will stand the severest tests from either a pharmaceutical standpoint or as regards their therapeutic uses.

If these preparations have your approval, as we confidently expect they will have, we trust you will prescribe them in your practice instead of designating any special maker's product.

Thanking you for your continued co-operation in this worthy cause, I am

Sincerely yours,

T. H. POTTS, Secretary.

In sampling your physicians we would again call your attention to the fact that you must act and assume the position of a pharmacist who is complete master of his art.

Your education has fitted you in a general way to state a preparation's possible therapeutic value, while the ability to recognize diseased conditions in a person is the physicians exclusive domain.

And in accordance with your exact interpretation of these undisputable facts will you be successful in this propaganda movement.

The Insert.

The eight page insert accompanying the April letter contained practically the following subject matter:

Page 1.—The title page, Seasonable Suggestions for the Busy Physician, etc.

Page 2.—Elixir Corydalis Compositum, N. F., giving uses, composition, palatability, and how its laxative properties may be enhanced by the addition of Cascara Sagrada or Podophyllin.

Page 3.—Liquor Cresolis Compositus, U. S. P., laying stress on its great importance as an antiseptic, its composition, freedom from caustic properties, uses, and advantages over other antiseptics. The benefit of the Soap in it, its appearance, touch and other characteristics and its germicidal powers.

Page 4.—Elixir Glycerophosphatum, N. F.—Describing its value in furnishing Phosphorus to the system, its composition, dose, palatability and other properties. Preparations of a proprie-

tary character and more or less similar to the above, have no greater therapeutic activity than this official Elixir. Besides, in prescribing by the official title you secure a preparation uniform at all times, a point well worth considering.

Page 5.—Tells of the extravagant claims made for such substances as Lecithin and Nuclein, based most likely on the mistaken idea that because the brain and nerves contain an abundance of compounds rich in phosphorus, their physiologic importance must be an index of their therapeutic value as inorganic preparations of phosphorus. Therefore, as Lecithin is a constituent of fresh eggs to the amount of about 25 grains to each yolk, it seems that this is carrying on advanced medical research with a vengeance, when the public must pay for it at the rate of \$4 to \$10 per ounce. Our daily food always contains an abundance of Nuclein and Lecithin, in fact much more than would generally be given in daily doses of these substances.

Page 6.—Contains a few paragraphs on the advisability of writing on certain prescriptions the words, "Non repetatur," which will be an entering wedge on settling this much mooted question and settle it right.

Page 7.—Gives the names of seven vehicles to assist physicians in prescribing palatable mixtures, viz.: Elixir Adjuvans, U. S. P.; Elixir Aromatic, U. S. P.; Elixir Curassao, N. F.; Elixir Glycyrrhizae Aromaticus, N. F.; Syrupus Asari Compositus, N. F.; Syrupus Aurantii U. S. P.; Syrupus Eriodictyi Aromaticus.

Page 8.—A short paragraph on the harmfulness of prescribing proprietaries and the benefits of prescribing official preparations.

CHAPTER XXVIII.

Propaganda brings out the pharmacist in you. If you are a good pharmacist, the physician will know it from the preparations with which you are sampling him, and from your conversation which brings out your general knowledge of related preparations.

This is what we are after. This is what the propaganda is for and nothing else. You must show the physician that you know what pure drugs are and will use no others in your preparations.

You must show him that you can make good preparations which are fit to use and that have therapeutic activity.

You should tell him that he can depend upon you and that he does not need proprietary nostrums in the treatment of his patients.

Your Code of Ethics.

Tell him that your personal code of ethics embraces three paramount conditions—that your honor compels you to make and sell only pure drugs and preparations, and your education fits

you to know such conditions; that your interest in your association and your text books is such that you know what is going on in professional circles, as regards advancement of the science of pharmacy; and that your apparatus used in making the official preparations is entirely adequate for any and all demands the physician may make upon you.

When you talk sound sense to a physician you have done all any man can do to beget confidence and all any reasonable physician is looking for.

Such a physician will work hand in hand with you as thoroughly as you will with him, for he is aware of the fact that his prescriptions will be accurately compounded and that both he and his patients will receive the best service the resources of a modern pharmacy can offer.

Talking Points.

The three preparations to be sampled this month afford an excellent opportunity for imparting valuable information to the physician.

Elixir Corydalis Compositus, N. F., is a most excellent alterative, and you should have many prescriptions for it if you do your sampling work well.

This preparation is an excellent combination of alteratives, and its laxative properties (which reside in the Iris) may be enhanced by the addition of Cascara Sagrada or Podophyllin, if necessary.

The composition of this preparation leaves very little to be desired among vegetable alteratives, although some inorganic alteratives might be mentioned.

Among these are the old reliable Fowler's Solution, Donovan's Solution of the U. S. P. and the Solution of Bromide of Gold and Arsenic, of the N. F., all depending primarily upon the Arsenic for their value as alteratives.

Lugol's Solution (Liquor Iodi Compositus, U. S. P.) is also a very reliable alterative and this will doubtless be exploited at some future time.

The Compound Solution of Cresol of the Pharmacopoeia should prove a

winner, for if made according to the directions (see Index), it places in the hands of the physician a most valuable antiseptic and germicide **free from caustic or irritant properties.**

A Preparation Par Excellence.

Some nostrum makers, advertising similar preparations to physicians, have been making frantic attempts to discredit this official preparation and it becomes your pleasant duty to inform the physician that **you** have the best, all other statements to the contrary notwithstanding.

Show him, with the aid of a test tube or bottle, that it mixes perfectly clear in **any and all proportions** with water; ask him to use it in $\frac{1}{2}$ per cent or 1 per cent aqueous solution on any mucous surface and he will find it free from any objectionable irritant properties.

A $\frac{1}{2}$ per cent solution is made by mixing one teaspoonful in one quart of water, approximately.

Don't hesitate to make your claims of superiority strong, as it is absolutely necessary in many instances to do so to overcome prejudice; your preparation will bear out your statements in every instance.

Your third preparation, the Elixir of Glycerophosphates affords another good talking feature to compel the recognition of official preparations.

The glycerophosphates have been introduced as a form of medication, as medical authorities claim that Glycerophosphoric Acid exists in the nervous system.

The use of this preparation is warranted therefore by logical reasoning and results prove its value, but you must be insistent that the physician prescribe only the official preparation, as in no other way can he be assured of pure drugs, correct proportions and absence of foreign material.

You must always bear in mind that the official preparations are a legal standard and that you must make them right, while nostrums have none but the so-called "freak" standard (each one made according to a manufacturer's viewpoint.)

Insignificant But Expensive Nostrums.

The much vaunted Lecithins, Phospho-lecithins, and numerous compounds claiming lecithin as the effective ingredient should be put before the physician in their proper light and you as a conscientious pharmacist are the only one to do it.

Lecithin is a constituent of fresh eggs to the amount of 25 grains to each yolk, approximately, and why the pharmacist should be compelled to sink a small fortune in these insignificant but expensive preparations is past belief. Back to first principles in medicine is your motto, and if your physician will order fresh eggs for his patients, they will get all the Lecithin they need.

Three raw eggs as a daily dose, cost about 6c, while an equivalent amount of Lecithin would cost the patient about 60c and over, according to whose would be prescribed.

Our daily food always contains an abundance of nuclein and lecithin, in fact much more than would generally be given in daily doses of these substances.

Allusion is also made in the insert accompanying the April letter to the following vehicles: Elixir Adjuvans, U. S. P.; Elixir Aromaticum, U. S. P.; Elixir Curassao, N. F.; Elixir Glycyrrhizae Aromaticum, N. F.; Syrupus Asari Compositus, N. F.; Syrupus Aurantii, U. S. P.; Syrupus Eriodictyi Aromaticus, N. F.

Have Them All on Hand.

It would be well therefore to have all these on hand, that you may not be handicapped when prescriptions calling for them come to you.

The insert also states that the physician should make frequent use of the word, "Non-repetatur" and at the same time tell his patient why he should consult him before having it refilled.

We feel that the burden of explanation (as to why a prescription cannot be refilled) should not rest solely with the pharmacist, hence the above caution.

We would, however, impress upon every pharmacist the dire necessity of heeding the admonition "Non-repetatur."

tur" (do not repeat) when it does appear upon a prescription.

CHAPTER XXIX.

Real pharmacy has suffered untold damage on account of the "elegance" flap-doodle with which our proprietary brethren have stuffed the physicians of this country for years past.

Nowhere is this more forcibly illustrated than in the case of hundreds, yes, thousands of ready-made pills and compressed tablets.

Every possible kind of drug, no matter whether liquid, solid, volatile, gaseous, aqueous, alcoholic or oily, is included in this terrible craze for "elegance."

It is high time this nonsense should cease and that pharmacists take steps to inform themselves what this "elegance" consists of, and then convey this information to the physician.

Elegance a Humbug.

Take the case of the official Compound Cathartic Pill; the Pharmacopoeia **does not direct** that this pill is to be coated. Why?

Because the authorities putting that formula in the book did not care to take the chance that this pill would become insoluble on account of the coating hardening.

What have most of the proprietary houses put on the market?

A fine looking, "elegant" pill, black, brown, white, pink or green, as suits the fancy, of any shape desired, but always with the object of making the pill "elegant." Why?

For no other reason, naturally, than to sell the pills. Color is entrancing, even in pills, and people love to take good looking, tasteless medicine.

But is there nothing else to be taken into consideration than selling millions of prettily colored pills? From the methods pursued in selling them and from the want of therapeutic results obtained, it appears not.

Elegance Replaces Activity.

Times without number, as almost every pharmacist can substantiate, have coated Compound Cathartic Pills

made by some manufacturer, been given in doses of 3, 4 and even 5 and 6 pills, and never a purgative action.

There can only be two reasons for this. Either the ingredients are not present that should be, or the pills are insoluble in the digestive fluids and pass off intact.

For it stands to reason that when a person takes $7\frac{1}{2}$ grains of Compound Extract of Colocynth, $5\frac{1}{2}$ grains of Calomel, 2 grains of Resin of Jalap and $1\frac{1}{2}$ grains of Gamboge (the contents of six pills), all these drugs being pure and standard, that some purgative action should take place.

And it would, were the pills uncoated and the drugs given a chance to work. Therefore, it is poor policy from a therapeutic standpoint to prescribe "elegant" coated pills.

What is true of Compound Cathartic Pills is true of all pills, and while some pills may be effective and true to formula, the results are too uncertain and life is too precious to needlessly experiment with.

What should be done is to get physicians back into the habit of prescribing freshly made pills, or to prescribe the powders in capsule form.

This is in harmony with getting back to first principles in medicine; less elegance and more action.

It is a peculiar fact that such physicians as prescribe for the ailment instead of prescribing for beautiful and elegant pharmaceuticals, always obtain better results with their patients.

Good Pharmacy.

By this it is not meant that physicians should prescribe horrid looking and bad tasting mixtures; but the medicine as prescribed should contain its full amount of activity first, with nothing present to hinder its action, and then be made as palatable as possible. That's real, genuine pharmacy.

When one considers that some manufacturing houses will make tablets containing volatile oils, Camphor, Sweet Spirits of Nitre, and even Chloroform, we must conclude that they

will do almost anything to corrupt pharmacy for filthy lucre.

There is no more rational way of prescribing and dispensing powders than by making a fresh pill or by enclosing the powder in capsule or cachet form, etc., if the medicine is to be administered in a palatable form.

Then you, as a pharmacist, are doing the work you were fitted for and it is profitable; the patient gets what he should have and is entitled to, and the physician has the satisfaction of knowing that his prescriptions are effective.

Make Your Own Pills and Capsules.

By having the component parts of such pills as Compound Cathartic Pills and any others that are frequently used in your pharmacy, ready mixed in the form of a powder, they can easily be made up into fresh pills or enclosed in powder form in the capsule.

You should inform your physician of this move on your part and your reasons for it, and that by this means he is able to change or vary the formula at will.

Also tell your physician that you are prepared to put up small doses of fixed or volatile oils in the ordinary capsule form. This is easily accomplished by filling the capsule with the required amount of oil, moistening the edge of the cap with water, and placing it on the capsule, forming a hermetic seal.

This is in direct harmony with getting back to first principles in medicine; this is a propaganda aid; this is the kind of work that will restore pharmacy to the pharmacist.

Propaganda is an advertising scheme wherein you are seeking legitimate trade through the physician. The harder you work it and the more enthusiastic you are, the greater your results.

CHAPTER XXX.

Of all the movements that have been advocated to make the drug business pay better, none are simpler nor more

easy of application than the present national propaganda movement of the N. A. R. D.

This movement is simple and easy of application because it is right in line with the druggist's daily endeavors and his life work, and he can thoroughly understand and appreciate it.

It is, therefore, in accord with common sense, because all people, druggists included, move along in the line of least resistance.

He realizes now as he has never realized before that by tending strictly to pharmacy and working along the lines of first principles in medicine, he has struck the keynote to his success.

Not that he should not be a business man and should neglect his numerous side lines, which as yet are necessary revenue producers to meet his daily expenses—not at all.

But this propaganda movement, if only "taken according to directions," will constantly increase his daily profits from month to month, even though only two or three prescriptions each week call for U. S. P. or N. F. preparations.

We dare not, we must not, become discouraged by slow progress; this movement is still in its infancy and five, six or even ten years may elapse before permanent and tangible results are apparent in all parts of our country.

Breakers Ahead.

It is a difficult thing to overthrow present conditions, no matter how rotten these conditions may be; much educational work must first be accomplished and many hard knocks must be our share.

But one thing stands out pre-eminent above all else, and that is that only a powerful association like the N. A. R. D. can successfully originate and sustain such an immense progressive undertaking.

Individual effort may materially assist conditions in one drug store, but the same physicians who are so much benefited by this one druggist's work are met by severe drawbacks in not getting this assistance from other druggists who may also receive these physicians' prescriptions.

For this reason, if for no other, effective and genuine propaganda work can only be done on a national scale, as is at present being done by the N. A. R. D.

Therefore, it is of the greatest importance that all pharmacists who put up physicians' prescriptions shall join this grand national association, that they may work in harmony and accord with their brother druggists in this grand work.

Up to Local Officers.

It becomes necessary, therefore, that local officers leave nothing undone to get every druggist into their local organization. It is absolutely essential for the success of the propaganda movement, for in no other way can the druggist realize the importance of the work, nor yet the various details in regard to harmonious action.

That it is a difficult task and often a thankless one for an officer to fill up the membership of a local association is only too true, as some men will not join any movement to better conditions unless paid to do so.

However, persistent and intelligent work will accomplish much. It will finally put the association in such a condition that it can say, jointly with the physicians, "**these** are the druggists who absolutely refuse to assist us in fighting our common enemy, who are consequently a hindrance to our progress and a handicap to our joint efforts." When you as an influential association will talk to your physicians in that manner, what is the result? This—the physicians will say, "If such is in reality the case, and your statements prove that it is so, we will use our best efforts in an attempt to keep our prescriptions away from such druggists."

It may appear an unchristian act to thus injure a brother druggist's trade and take away his daily bread, but self-preservation is the first law of even every good Christian.

Besides, it is a mooted question whether you would really be taking your brother druggist's bread away from him, or whether he refuses the bread offered him.

We claim there is more good done by physicians sending their prescriptions to pharmacists who are anxious to help progress with their small association dues, than to send them to the small fellow who does everything to block the wheels of progress by his inactivity.

We would suggest, therefore, that all local officers make several herculean efforts to get every pharmacist into their association and then they will know exactly where they are at, as far as their own progress is concerned.

CHAPTER XXXI.

Another month has rolled along, another propaganda notch has been cut on the staff of pharmacy, and on the opposite page is given a rough copy of the fifth letter which the National Association sent out in May, 1909.

Druggists generally should realize the responsibility of working hand in hand with the doctors, as excellent results must sooner or later come from it.

Do it purely for selfish reasons if you want to, do it secretly if you can't as yet to do it openly, **but do it**, using every honorable means to further the propaganda of the U. S. P. and N. F. preparations.

Get back to first principles in medicine. If you don't like the idea of thinking that the exploiting of your own official preparations will bring profitable prescription business, reverse your thinking apparatus and start your thoughts with the money question uppermost.

You must make more money out of your business, but how will you go at it? At the present time, a most effective method is to keep step with the thousands of your brother druggists and talk, act, think and work U. S. P. and N. F. preparations with your physicians either openly or secretly.

Implant the seed of the open formula in the physician's breast and never fear that it will not bear fruit, for it **will**.

You can well afford to wait until it does bear fruit, even if it takes twelve months to become convincingly apparent. But you must **do something**—you must let the N. A. R. D. send your physicians letters and valuable information upon the U. S. P. and N. F. preparations.

The physicians thoroughly appreciate this work for it tells them something they never knew before, but should know.

Not only that, but they are finding out that the N. A. R. D. is teaching them something that neither the medical colleges nor the manufacturing houses have taught them.

The medical colleges could not, for they had not the time; and the manufacturing houses dared not, for it would have prevented their putting hundreds of nostrums on the market.

W. S. Elkin, Jr., a former president of the N. A. R. D., stated before a Georgia medical society, recently, among other things:

"Let's get together and practice pharmacy and practice medicine from first principles. I beg of you, since you are laboring for the good of humanity, to urge your members to not usurp the rights of the druggist by dispensing what he has given years of his life to learn and what the State of Georgia says he is competent to do."

If this statement had been made ten or fifteen years ago, the Lord only knows what would have happened to Mr. Elkin; but times have changed, and these same Georgia physicians have asked Mr. Elkin to deliver his speech before other medical societies.

Truth is, druggists as yet fail to realize what a most excellent opportunity they have at the present time to cement the two professions into an unbreakable union.

Our Fifth Letter to Physicians.

Dear Doctor:—

The three preparations to which we would call your attention this month and which are described in the enclosed folder will, we hope, be of considerable assistance to you in your practice.

These preparations are official standards, their composition is uniform, and they have merit; no fake claims are made for them and any capable pharmacist can prepare them.

Proprietaries of somewhat similar composition have been on the market for some time under various fanciful names, with their generally exaggerated claims as to their merits.

We beg leave to call your attention to the statements made in the folder as regards the originality of the U. S. P. and N. F. prepara-

tions, many medical practitioners being still under the impression that they are mostly imitations of nostrums.

We are also setting forth some arguments in favor of prescribing freshly made pills, and powders to be dispensed in capsule form, etc., and trust this information may prove of some value to you.

We assure you of our willingness to co-operate with you in every possible way at all times.

Anticipating your continued friendly interest and co-operation, I am,

Sincerely yours,

THOS. H. POTTS, Secretary.

The Insert.

The eight-page insert accompanying this letter for May will contain substantially the following subject matter:

Page 1.—Title Page.

Page 2.—Unguentum Resorcini Compositum, N. F.

Page 3.—Tinctura Viburni Opuli Composita, N. F.

Page 4 and 5.—Essentia Pepsini, N. F.

Page 6.—On the originality of U. S. P. and N. F. preparations.

Page 7.—The superiority of freshly made pills and encapsuled powders over the ready made pill and tablet.

Page 8.—An appropriate paragraph on the U. S. P. and N. F.

CHAPTER XXXII.

In view of the importance of the eight page insert which accompanies the letters to physicians, it will materially assist the pharmacist in his sampling, to read the May insert in full.

It is always well to supply yourself with ammunition in the shape of added information, as regards preparations related in some manner to those with which you are sampling the physician, thus materially assisting your cause.

The insert is entitled "Three Ethical Preparations," and page two describes Tinctura Viburni Opuli Composita, N. F., as follows:

The Compound Tincture of Cramp Bark is a valuable uterine and ovarian sedative and owing to its antispasmodic action is useful in general nervous irritability.

It is best administered in hot water, preferably sweetened and is then not at all unpleasant to the taste.

There are many proprietary Viburnum compounds on the market under various fanciful names of somewhat similar composition, but it is well to guard against them as their composition is unknown.

They are also as a rule accompanied

by literature which naturally leads to self-medication.

The composition is also given.

Page three gives the composition of Unguentum Resorcini Compositum, N. F., and gives its various qualifications and properties, as a valuable antiseptic, a great reliever of itching in skin diseases and a reliable discutient.

It is a perfectly smooth ointment and free from grittiness. Exposure to light and air will produce a slight, unimportant change in the color of this ointment which, however, in no way affects its therapeutic action.

Pages four and five are on Essence of Pepsin, N. F., giving its composition and general properties, uses and incompatibilities. It should not be dispensed with strongly alcoholic liquids nor solutions of alkalies, as these impair its proteolytic action.

A combination with dilute hydrochloric acid (about 1 in 30) or bitter drugs, like gentian and calumba, increase its activity.

Pepsin Information.

Pepsin is often associated with Pancreatin in mixtures, but if the effect of both these drugs is desired, they must be prescribed separately. These two drugs mutually destroy each other when in solution, and such solution is therefore valueless as a therapeutic agent.

Pepsin acts only in an acid medium, while Pancreatin acts only in an alkaline medium.

Hence the action of Pepsin is best obtained by prescribing the Essence of Pepsin, N. F., or one of the other preparations of Pepsin or Pepsin itself.

If the action of Pancreatin is desired, the official Liquor Pancreaticus, N. F., freshly made, affords a satisfactory preparation.

We also believe that if these two drugs are used rationally, there will be little use for the numerous preparations on the market, all calculated to replace pepsin and pancreatin, but none of which have the intrinsic worth of either and can never replace them.

Page six contains the following:

Original, Not Imitation.

The attention of physicians is

called to the fact that U. S. P. and N. F. preparations are original ones, and not imitations, as some still seem to believe.

In carefully looking into the history of the various additions to each succeeding revision of the U. S. P. and N. F., we find that each and every addition originated with a pharmacist or physician in active pursuit of his profession and often also with some well known chemist or other original worker, not owned by a private corporation.

This is proven conclusively by the thousands of articles in drug and medical journals, the papers read at the various state and national associations of pharmacists and physicians, and works on pharmacy, chemistry, etc., for many years past.

Various manufacturers of nostrums have unhesitatingly spread the misinformation broadcast that many of the official preparations of both the U. S. P. and N. F. were imitations of their own products.

This is in harmony with many of their other exaggerated statements and false claims and is made for no other reason than that of possible financial gain.

Seek the truth and you will find it.

Freshly Made Pills, Etc.

The "elegant," ready made coated pills and compressed tablets on the market today, have been the cause of numerous disappointments with physicians.

The coating on the pills has become hard and insoluble and the tablets are compressed at such a great pressure, that disintegration, in numerous instances, is impossible.

The action must necessarily be uncertain, untoward effects are often produced and a great injustice is done the patient.

Freshly made pills, on the other hand, will always disintegrate rapidly in the stomach or intestines, and have the added advantage in that the physician can vary the formula to suit each individual case.

These freshly made pills, as also mixtures in powder form, can be en-

closed in gelatine capsules and then have every possible advantage over the ready made form and none of the disadvantages.

Volatile oils can also be readily encapsuled and any capable pharmacist is able to do this class of work.

Page eight is the back cover page, as follows:

Why the Open Formula?

When a physician knows what physiological conditions are present in a patient;

When he then prescribes for this patient a remedy whose exact composition he knows and it removes the morbid conditions, thereby restoring the patient to health;

Then this physician has a powerful lever to assist him in other similar cases, as he knows exactly what drug or drugs assisted in the cure.

With a nostrum this is not possible, as its composition is unknown and is liable to change at any time.

CHAPTER XXXIII.

There is one harmful consequence that professional pharmacy and a firm belief in propaganda work might do to the pharmacist if he is not careful.

This is the useless habit of forcing professional dignity upon your customers.

While it may be a lamentable fact, it is nevertheless a true one, that your customers are not interested so much in the advancement of pharmacy or its scientific attainments as they are in the purchasing power of their money.

There is one important factor, therefore, that must never be lost sight of in dealing with people and that is that all people are selfish.

In one of the articles on advertising and salesmanship further on it is clearly pointed out that courtesy is the key to business success and that the cold-blooded definition of courtesy was the habit of appreciating your customers' wishes, recognizing their wants intelligently and giving due consideration to their desires.

Hence, realizing the selfishness of people, it behooves you to be courteous and to refrain from forcing your professional qualifications upon them.

Your professional qualifications, the advancement of pharmacy as such, etc., are fit subjects for discussion and demonstration with your medical friends; and here is where such activity will do some good.

Two Sides to the Drug Business.

This brings us to a realization of the fact that the present status of the drug business is twofold, namely, your ordinary sales to customers, called the commercial side, and your dealings with the physicians and the manufacture of medicines, called the professional side.

You must differentiate these two sides and talk commerce to your customers and professionalism to your physicians—then you will succeed.

Your commercial talk derives its greatest assistance from your advertising, from the way you treat your customers and from the general appearance of yourself and your store.

You must endeavor to imbue your customers with the idea that your store gives them the most for their money, quality considered.

And you should keep harping on that subject continually, in talk and in print; you must always be fighting for your share of their trade by every known method at your command that is honest and fair.

A moment's reflection should teach you the truth of this statement: you yourself are in a degree selfish, and should you be so situated as the great majority of druggists are, in a small town or city, you are what is commonly termed "the whole thing," "our druggist," "the druggist," etc.

You realize that to a large extent you are an important personage and you are impressed with the dignity of your calling, of your profession.

Now if you are not very careful you are apt to magnify this "importance" in your own mind, and when you are

in this condition, you begin to talk it and then the danger begins.

That is, it would begin if you were to talk "importance" of yourself and your profession to your customers—you would "talk business to death."

Professional Talk for Physicians.

Now bottle up all this "importance" and enthusiasm, and keep it for your physicians, dentists and veterinary surgeons; they like to hear it, and if you are sincere, which you naturally are, they are able to turn it to your advantage.

Don't you see how this process doubly helps you; your commercial activity and your courtesy make people like to trade with you and you give good value for their money; then your physicians, impressed by your professional qualifications which he can appreciate, inform their patients that you are also a safe man to deal with as regards compounding, etc.

In this way you have them coming to you both ways and you become a commercial and a professional success.

The moral of all this is "Give people what they come for" and "don't try to impress them with your importance as a professional man nor talk of the scientific end of your business to them."

Advertise, be optimistic and talk propaganda to your physicians, then you have a real fighting chance to lay by a good snug sum for a rainy day.

CHAPTER XXXIV.

Numerous letters of approval and commendation from physicians have been received.

From the tenor of the great majority of these letters we find that the physicians are much more alive to the benefits of the propaganda movement than are the pharmacists.

The reason for this is apparent—as physicians are the first real sufferers through prescribing medicines of any kind that do not help their patients.

We know that for the past fifteen

years or thereabouts, the physicians have prescribed numberless nostrums or so-called semi-ethical preparations.

The time has come now when the fad is on the wane; they have had their inning and, taken as a whole, they have been found wanting.

The real results that physicians have a right to expect from medicine have not been apparent at any time and the day of reckoning is here.

While the limit has not yet been reached, the proprietaries have about worn themselves out trying to cure people and it is clearly up to the physicians to prescribe real medicines.

It has finally dawned upon the people and the physicians alike that for years medicines have not had the curative effects that were to be expected.

Are You Ready?

The time has come when something must be done and happily (or luckily) the remedy is at hand.

The pharmacist must come to the rescue and he is already nobly responding; the physicians want real medicines, they must have them, and the pharmacist must furnish them.

Therefore, it is for those pharmacists who as yet are not fully aware of this **real and actual condition** which is confronting the pharmaceutical world today to wake up.

This is an opportunity you so often read about but seldom heed—a condition, not a theory—a real something and not a dream.

The time to act is NOW, and we must do our duty by taking advantage of this opportunity. We have a real duty to perform—a duty you owe the public by reason of your certificate as a registered pharmacist.

Do this duty, for a duty it is, and show the public and the physician that you are equal to it—that you are equal to help the physician with real work; we would not be so insistent if the need were not so apparent and so urgent.

This opportunity is what we have been waiting and praying for—now it is here, and are we going to let it slip by?

A Revolution.

This opportunity is in the nature of a revolution in medicine, it is the revenge of injustice and oppression.

It means, if we work and fight as we should, the inevitable doom of rottenness in therapeutics and the birth of a new era in official and scientific medicine.

It means the breaking down of a lie in medicine—a lie that has held us in its oppressive power for years.

Will the pharmacists of our country realize the situation? Will they give it the thought which it requires? Will they band together and fight for the principle, realizing that the time to strike is NOW?

We think so, because in numerous localities the entire subject has been thoroughly threshed out between the pharmacists and the physicians, and in every case official medicine has won the day.

But this is not enough.

Every pharmacist must do his share, no matter where situated, and he must work hard.

The final outcome, if successful, is certainly worth our best and most strenuous efforts, for as these secret medicines and all the evils that go with them are 99 per cent the cause of the breach between the medical and pharmaceutical professions, so their annihilation will prove the means of reuniting these two noble armies.

But, pharmacists, do not let the fact that you possess a diploma, or a certificate as registered pharmacist lull you into a sense of false security.

Again, Are You Ready?

Analyze yourself, examine yourself, and find out for yourself whether you are a **real** pharmacist and able to make all official preparations. Are you awake to the necessity of being laboratory workers, of making **real** medicines, of being **qualified** to step right into this breach to help the physician out of his predicament?

Or, are you going to abide by the decision of being what the proprietary houses are calling you, weak, incompetent, uneducated substitutes, who

are not fit or capable of preparing medicines?

A Georgia Physician Quoted.

Dr. W. B. Moore, of Eatonton, Ga., writes: "Being very much interested in the grand and noble work that your association is trying to do and is doing for the medical profession, I desire to offer you my heartiest co-operation in this work. The getting back to first principles in medicine is my ideal.

"The great army of physicians of today has lost its own identity by prescribing blind mixtures—stuff that they know nothing of, only as the preparer of such stuff tells him. I feel proud that I have never been caught by their net."

CHAPTER XXXV.

Every once in a while we read or hear something about knocking U. S. P. or N. F. preparations, about as follows:

A doctor writes a prescription for Elixir Gentianae Glycerinatum, N. F., six fluid ounces. The druggist, when he had it filled and came to wrap it up, says to the customer "next time I would advise you to buy a bottle of Gray's Tonic," at the same time exhibiting an original bottle of the nostrum, and saying further "that the doctor knew it was the same and that he (the customer) could thus get a larger quantity for his money," etc.

Similar instances, true ones at that, have occurred many times and with other preparations, such as the Compound Syrup of Hypophosphites, the Alkaline Antiseptic Solution, etc.

Must Expect Knocks.

These things are to be expected in such a national propaganda campaign as the N. A. R. D. has undertaken and are "the little rowboats trying to ram the big battleship."

But what is the object of these druggists (?) in doing this? What do they hope to gain by such methods? What is their game?

Simply this: The agent for the nostrum comes to the druggist or his clerk and states that for such and such a

remunerative consideration, maybe 10%, maybe 20%, or possibly even 25%, he should "plug" for his nostrum.

The druggist (?) seeing a chance for gain, naturally and readily acquiesces. So every prescription which comes in, and which in the least resembles the nostrum, will be put through this same process of "knocking."

This occurs not only with prescriptions, but with proprietaries, also in sending cases of venereal disease to a certain doctor for a consideration of \$25, or therabouts.

Now a real pharmacist may throw his hands up in horror at realizing that such practices are in vogue. A physician whose prescriptions are thus treated may lose all faith in the propaganda for reform in prescribing; but for heaven's sake, don't do anything rash. Forget the incident.

Intelligent Effort Needed.

It shows that the heaven is working, that first principles are being revived, and it teaches the physician something he has possibly been negligent in.

The "something" is this: The physician must use his influence more in directing his patients where to have his prescriptions refilled; he must inform himself of who the pharmacists are that will do as they should and who are honorable. This should be an easy matter for the physician, for almost every one of these cases happens, either in one of the large department stores or in a large cut-rate drug store, that have long been noted for this kind of crooked work and who otherwise could not exist.

It is, however, the duty of every honorable pharmacist to inform each and every one of his physician friends of the conditions as they exist in these places and of the great necessity existing requiring that he keep his prescriptions away from them.

Prove to your physicians that you are capable and efficient in your professional work and that your integrity is beyond question—that you consider the quality of the medicine first and the remuneration last.

If you will freely grant that the doc-

tor knows what he wants, when he wants it and will act accordingly, magnifying service and quality and subordinating profits, then your physician will be a friend indeed and a loyal patron.

Such physicians will see that none of their prescriptions go to pirates in the department stores or pharmaceutical ranks—where they place the almighty dollar above everything else.

The Substitutors.

These merchants and druggists (or such of the number as once were druggists) are the scum of the profession. They are ostracized from all honor and all honorable men, and all there is left for them is to defraud by some means or other the numerous victims that come to them to get "bargains"—the sort that are the bane of the American people.

While it may, in isolated cases, appear that these people are somewhat retarding the onward march of the propaganda movement, such is not the case.

The advancement of pharmacy and medicine does not, never has, and never will, depend upon the dishonorable attacks of a few pirates with more money than honor.

It is these people who have probably never owned a pharmacist's certificate, who are in business solely for the money there is in it, that are 100% of the cause of the cry of substitution "by the druggist."

And then, with this as a basis, some of the manufacturing houses call the pharmacist dishonest and a substitutor.

It is not even a case where the innocent suffer with the guilty, but where the innocent suffer for the guilty.

We Must Stand Up for Our Rights.

Now the question is, how much longer are the pharmacists going to put up with this condition, when through it even the newspapers knock them as often as possible, and when even honorable manufacturing houses may soon be led to believe that it might be true?

Silence gives consent.

How much longer are you going to hide your light under a bushel and re-

fuse to practice the profession you, and you only, have a right to, according to all law and precedent?

How much longer?

CHAPTER XXXVI.

Herewith appears a rough draft of a sixth letter to be mailed to physicians.

Every pharmacist should endeavor to put forth his very best efforts on the three preparations for June, and demonstrate in a convincing manner that he knows exactly what he is talking about and is able to prepare a first-class preparation.

These three preparations should bring forth an extra effort on your part. They represent valuable remedial agents that in some form or other have been used by physicians for many years.

You are calling his attention to these particular three preparations because they are active therapeutic agents in palatable form and representing some of the best known methods for administering them.

The Letter.

Dear Doctor:

Today we are bringing you some valuable information on Iodine, Antiseptic Powder and a few other subjects.

During the past six months we have endeavored to originate a desire on your part to know more about the therapeutically active and reliable preparations of the U. S. P. and N. F.

If that desire has been made manifest on your part, we sincerely trust that our position has been substantiated, through good example and practical aid rendered.

Owing to our efforts with members of our own profession, it is a pleasure to be able to state that pharmacists are thoroughly alive to the necessity of this reform crusade and are daily becoming more efficient as co-workers with the medical profession. The splendid support we have received from physicians throughout the country in our endeavor to get back to first principles in medicine is most gratefully acknowledged, and we assure you that there will be no let up in the work.

A capable pharmacist will stand sponsor for all U. S. P. and N. F. preparations, so do not hesitate to demand them upon your prescriptions.

After today we will allow ourselves a two months' vacation, and early in September we will continue with our work of bringing desirable information to the attention of our physician friends.

With kind regards, I am, sincerely yours,

T. H. POTTS,

Secretary.

The eight-page insert which will accompany this letter will briefly describe the Syrup of Hydriodic Acid,

U. S. P., the Antiseptic Powder, N. F., and the Glycerinated Elixir of Gentian, N. F.

It will also give some information on the Compound Solution of Iodine, U. S. P., and a few paragraphs on other subjects of interest to physicians.

Take No Chances.

It is most important that the preparations be made according to their formula, as it is possible that preparations of the U. S. P. and N. F. standard will not be purchased through the ordinary trade channels and you cannot afford to take chances.

Nor need you take any chances, for you can secure good drugs and chemicals and by performing your duty as a pharmacist and following the simple directions laid down, your preparation should be absolutely perfect.

You must be very careful of the source of your supplies, realizing that quality is everything and price only a secondary consideration.

A jobbing house or a manufacturing concern that has no high ideals in regard to quality is not a safe house for you to deal with.

If you order drugs for U. S. P. or N. F. preparations, specify "U. S. P." or "absolutely pure" quality, and do not accept **anything** else, not even if marked "technical."

CHAPTER XXXVII.

The following is the insert which accompanies the letter to physicians in June.

Study it carefully, that you may become thoroughly familiar with what the N. A. R. D. has done, and be sure that your three preparations are perfect, as per formula.

PAGE 1.—GETTING RESULTS FROM PRESCRIBING.—This little booklet should prove of value to the physician who is looking for a square deal in medicines.

PAGE 2. RESUME.—During the past six months we have brought to your attention the preparations enumerated below; these with the three contained in this booklet represent a total of eighteen modern scientific preparations, each one reliable, uniform and of standard composition.

We trust your experience with them has been such that you will continue to use them in your

practice and that all have measured up to your expectations.

"Here follows the list of the 15 preparations, with uses & doses."

Should you desire further information upon any of these preparations or have misplaced any of the booklets sent you, kindly inform us and we shall be pleased to comply with your requests.

PAGE 3. DIRECTING PATIENTS.—If you are interested in your patients and in the correct filling of your prescriptions, a word of caution in directing them will not come amiss.

It undoubtedly is an easy matter for you to direct your patients to have their prescriptions filled by those pharmacists of your acquaintance whom you know to be reliable.

But it is of greater importance to you, however, to direct your patients where NOT to go.

Many owners and clerks in department stores and in some cut rate drug stores, with a greater leaning toward the almighty dollar than toward honor, have a peculiar habit of receiving substantial commissions from nostrum makers.

The result is that standard medicines and the doctor's prescriptions are "knocked," the customers are told that the "nostrum" is much cheaper and that the doctor knows they are the same.

If you do not wish to have your prescriptions "knocked" in this manner, we trust that you will exercise your judgment as to who shall fill them.

PAGE 4.—SYRUPUS ACIDI HYDRIODICI, U. S. P.—This is a permanent and pleasant tasting syrup, containing 1% of pure Hydriodic Acid. The dose is from 2 to 8 Cc. ($\frac{1}{2}$ to 2 fluidrams.) It should be made fresh for prescriptions.

USES.—This syrup is valuable for its iodine influence on the system and is preferred by many practitioners to the alkaline iodides.

Although the merits of iodine as an alternative reconstructive agent have been well known for scores of years, the endorsement of this Syrup has been handicapped by the unsightly mixtures and indefinite compounds of some special manufacture.

Not until the advantages of a freshly prepared U. S. P. Syrup were brought to the notice of the medical profession, did this form of iodine medication receive the endorsement that it justly merits.

Specify U. S. P., and get the fresh preparation.

PAGE 5.—IODINE FRAUDS.—Iodine has afforded a peculiarly fertile field for the inventive and imaginative maker of nostrums.

While now and then a combination is discovered that has merits in certain cases, there is absolutely no excuse for the existence of most of the numerous organic iodine compounds, labelled Iodabate, Iodnucleinate, organic Iodine, etc., intended for internal medication.

A Real Iodine Preparation.—There is not one of them that has the therapeutic value of the official *Liquor Iodi Compositus* of the U. S. P., and commonly called *Lugol's Solution*.

When this most excellent preparation, containing 5% of free iodine and 10% of Potassium Iodide in aqueous solution, is given in 3 or 4 minim doses with milk or eggs to lessen its irritant effects, the resulting combination is much more effective and far more economical than any of the so-called organic compounds of iodine.

℞ *Liquor Iodi Compositus*.....3℥ss
Glyceriti Vitelli, N. F.....3℥i
Aqua Aurantii Flores.....3℥i
Syrupus Tolu, ad.....3℥iv
M. Sig. Dose, One teaspoonful, in water or milk.

PAGE 6.—PULVIS ANTISEPTICUS, N. F.—This is a most valuable astringent antiseptic, always of uniform and definite composition and is a highly meritorious preparation.

Its Active Constituents.—It contains approximately 87% of Boric Acid, 12 $\frac{1}{2}$ % of Zinc Sulphate, $\frac{1}{2}$ % of Salicylic Acid and 1/10% each of Carbolic Acid, Eucalyptol, Thymol and Menthol, in the form of an impalpable powder.

It has a wide range of usefulness as a dusting powder in inflammatory skin diseases, etc.; is also used in douches. Its formula is the result of careful and painstaking research by eminent physicians and pharmacists.

Other Characteristics.—The Soluble Antiseptic Powder is of a white or faint pinkish color, and possesses an agreeable aromatic odor, and dissolves in hot or cold water.

It is unirritating, either dry or in solution, and in prescribing, it should be given the preference over nostrums claiming similar composition.

PAGE 7.—ELIXIR GENTIANAE GLYCERINATUM, N. F.—This Elixir is a palatable preparation, of a rich, dark brown color, an agreeable odor and of uniform composition.

Its Composition.—It contains 1% Gentian, 1 $\frac{1}{2}$ % Taraxacum, 40% Glycerin, nearly 1% Phosphoric Acid, and 20% Sugar, in Sherry Wine, and is flavored with Orange, Acetic Ether, Saccharin and Compound Tincture of Cardomon.

The average dose is 8 Cc., or two fluidrams.

Therapy.—Besides being a most efficient bitter tonic and alterative, it is also an excellent vehicle for many drugs, notably Pepsin, Strychnine, etc. Its tendency is in promoting the digestion of proteids, thus indirectly aiding digestion.

Several proprietary preparations have recently come on the market under the general name of "Glycerin Tonics," of possibly somewhat similar composition to the above, but by prescribing by the N. F. title, you are assured the standard official medicine.

PAGE 8.—QUALITY COUNTS IN MEDICINE.—If you Specify an Ethical Preparation, why not specify that Pharmacist who properly conducts his Pharmacy?

Progress in the Air.

It will be seen that when the physician reads this insert he will have occasion and reason for being a little bit more particular as to who puts up his prescriptions.

Study this insert carefully and be guided by its teachings; it implies progress in the pharmacist's career and we must be alive to our opportunities.

We have never before had these chances of doing something for pharmacy's advancement, and we should not hesitate, now that we have it in our power to push forward.

Do not let anything stand in your way of having the preparations mentioned in the insert ready and true to formula.

What you should thoroughly understand is that at the present time, in the year, 1909, the pharmacists are being placed in a balance and we hope none will be found wanting but will measure up to a U. S. P. standard of excellence.

This is pharmacy's year for progress.

CHAPTER XXXVIII.

Now that pharmacists are awakening to the fact that "eternal vigilance is the price of safety" and are showing an active interest in the struggle to get back to first principles in medicine, we would caution them in regard to "false friends."

It has often been said and truthfully so: "My open enemies I can guard against and fight, but save me from false or would-be friends."

The schemer who is working for his own selfish interests, is so full of various schemes that it is not a difficult matter for him to deceive 45,000 pharmacists.

False Friends and True Friends.

There should be differences of opinion and an exchange of opinions serves to smooth out our rough places and promote our progress.

But when we read peculiar addresses in drug journals or in medical journals, severely criticising and knocking U. S. P. and N. F. preparations, it looks as if there might be "a nigger in the wood pile."

All pharmacists should know that the drugs and preparations of the U. S. P. and N. F. are very good and active therapeutic agents, strictly reliable, standard and official. Both the U. S. P. and N. F. are recognized as standard works by the Federal Government.

They are the product of the very best of thought from our most eminent physicians and pharmacists for nearly one hundred years past.

We admit that they are not perfect; but we are rectifying mistakes of omission and commission as rapidly as possible. It is but natural in works of this kind, that represent yearly progress, that changes should be made.

Where Attacks Come From.

But when the preparations are attacked, made fun of and disparaged in our professional publications, even by inference, you can put it down as a fact that the attacks are made by an emissary of the nostrum maker or by a druggist who is too ignorant or in-

dolent to prepare an official preparation.

We would call the attention of pharmacists to the simple fact that when they see such articles in print or hear similar statements spoken, they should consider their source, and be governed accordingly.

Our attention has lately been called to a paper read before a state pharmaceutical association meeting, under a catchy title, about the madness of the U. S. P. and N. F. propaganda.

The author wished to point out the absolute **fallacy, impracticability and injustice** (just think of it) of the **entire** methods pursued and ultimate object aimed at in this propaganda work.

The author says: "Now, gentlemen, above all things let us be fair and just to those who originally **devised and discovered** those new formulas (meaning the nostrums) and give them credit for their discovery, the same as you would expect to receive if you had a preparation which was being used by the medical profession; but do not condemn such remedies and then ask to have the same thing prescribed under another name."

Now this is very peculiar reasoning, because if the author had told the facts which he readily could have gained by looking for them, he would have discovered that the **devisers and discoverers** of the more popular of the nostrums were either practicing physicians or pharmacists.

The Real Discoverer.

Is it not a fact that in numerous instances a physician or a pharmacist has secured most excellent results from the use of a certain formula? And not having the facilities to prepare large quantities, he has listened to the pleadings of the manufacturer to have it made up for him, "according to the latest scientific methods, with improved machinery," etc.

Then he gives up his formula and the manufacturer at once has "a valuable new discovery (with, of course, a nice fancy name attached), one that is no experiment, as it has been tried

with success in hundreds of cases by our most eminent clinicians," etc., and all the rest of the tommy-rot we are all familiar with.

But more than this, as we have repeatedly stated, if the medical and pharmaceutical journals, scientific association papers and text books are carefully searched for years past, you will therein find the gradual development of nearly all of our official preparations, and the developing was done by physicians and pharmacists, not by nostrum manufacturing houses. All the houses have done was to appropriate the formula, tack on a fancy name, and advertise it. Gullibility did the rest.

And this is what this author calls the "research" and "investigation" of the proprietary remedy manufacturer!

Propaganda Is a Success.

He gives three reasons why propaganda work cannot be successful, good reasons, too, in theory. Now the N. A. R. D. can give one hundred reasons why propaganda can be, and is, successful, but we will give only one, a very practical one at that, and which we think is all sufficient: Physicians have told us and pharmacists have emphasized the physicians' statements by their prescription files, that this propaganda movement of the N. A. R. D. has caused a very large increase in their prescription business, and we have actual proof of it.

The author of this book, as director of the national propaganda movement of the N. A. R. D., has received numerous letters from physicians in every state commending the movement, and fine letters from pharmacists praising the work and stating the good it is doing—and should we say these men are deceiving us and are just jollyng the N. A. R. D. along to destruction? We hardly think so.

And the N. A. R. D. propaganda movement was not six months of age at the time.

You are away off, brother author, and the cobwebs in your brain need removing. You have not the right idea.

CHAPTER XXXIX.

As indicated in the previous chapter, pharmacists should carefully sift all slurs and knocks on our official and legal standards, the U. S. P. and N. F., especially the latter.

That article should be memorized by pharmacists generally and acted upon in an intelligent manner, if for no other purpose than to be of assistance to them in sorting out the hypocrites among the manufacturers and those who echo their sentiments.

We do not believe there is a real pharmacist but what knows there are hundreds, yes thousands of good active drugs and preparations not official in the U. S. P. and N. F. which are daily used by physicians.

These medicinal agents, some four thousand in number are all good and reliable, and the compilers of the U. S. P. and N. F. have taken some fifteen hundred of the more commonly prescribed ones and set up a high class standard for them, for the protection not only of the physician, but the pharmacist and public as well.

Many manufacturing houses issue a regular paper, purporting to be a real scientific publication, but generally nothing but a very clever piece of advertising of their nostrums and their principles, and thinly veiled attacks on everything that might hurt their business. The following is a sample of such an article that is going the rounds of this class of "medical literature" at the present time:

Calls the National Formulary a Mistake.

"The National Formulary was a grave mistake. Many of those who a short time ago were its most ardent supporters now realize that this book will do more to injure honest scientific pharmacy than any other recognized evil. The story it tells is not science nor is it progress, but too plainly sordid gain and avarice. It seeks to promote profits in ill advised if not dishonest ways, and thus at the very outset destroys respect and confidence.

"The medical profession assuredly needs all the knowledge it can get along the line of scientific pharmacy, but when it asks for legitimate aid, and in response is promptly made the means of selfish ends, distrust and suspicion are engendered all too soon. Honest pharmacists if they wish to estab-

lish close relations with their medical patrons must therefore sooner or later repudiate the National Formulary.

"There never was a time when scientific pharmacy was on a higher footing than it is today and with proper effort it can very easily come to its own. Efficiency is the secret, with the establishment of a professional dignity that comes from capability and integrity. Hundreds of pharmacists are today enjoying the most profitable relations with their medical clientele simply because they have had self-respect enough to subordinate profits, and magnify service.

"The pharmacist, therefore, who freely concedes that the doctor knows what he wants when he wants it, and acts accordingly, will find sooner than he expected that he has won a loyal patron and a firm friend. We will hardly jeopardize such a friendship by foisting upon it a manual of substitution."

Whoever was the author of the article just quoted is hereby branded as a person who is a traitor to every forward pharmaceutical movement.

Who Wrote the Article?

Of course the article is written from the standpoint of a true nostrum maker, who imagines himself all-powerful in the light of past accomplishments, but who is like the proverbial bug under the rotten log—when the log is kicked away and the light shines on it, he scurries for cover, back to his dark hiding place.

Any man who has a man's rich red blood in his veins would not pen the brazen statement, somewhat thinly veiled "that the authority responsible for the existence of the National Formulary seeks to promote profits in dishonest ways."

These, brother pharmacists, are the sort of pseudo-pharmaceutical and pseudo-medical writers we have to deal with in bringing to the attention of the medical profession the original formulas of the U. S. P. and N. F.

If this author is even sincere in his statements (in his ignorance) he has an opportunity now of bringing to the attention of pharmacists and physicians any preparation of the N. F. that is an imitation of a nostrum. **WE WOULD LIKE TO BE SHOWN.**

How such authors (?) do like to dictate the policy of the retail pharmacist, do all his thinking for him, and prepare all his medicines for him.

Pharmacists No Longer Led.

But we are glad to state that this condition is fast becoming a thing of the past, not only with pharmacists but happily with physicians also.

The article states "many * * * now realize that this book will do more to injure honest scientific pharmacy than any other recognized evil."

We have abundant proof of the fact that such authors or their hirelings are unable to properly judge what "honest pharmacy" consists of, inasmuch as they do not practice it themselves on all occasions.

The great power that these authors (?) have wielded heretofore has been gained by making remarkable statements of what extensive and expensive laboratory equipment they possess, how great has been their scientific research work, etc., etc., etc., ad infinitum, and their statements have never been questioned.

But it is a long road that has no jog, and duplicity will come to light sometime or other. The present-day pharmacist, with his unconquerable desire to seek out and know the truth, is very rapidly becoming able to look out for himself.

CHAPTER XL.

It is a pleasure to note with what increasing interest the pharmacists are pushing their claims to recognition as dispensers of medicine.

There is not a shadow of a doubt but what any and every pharmacist can perform wonders in the extermination of the numerous nostrums that serve no useful purpose **whatever**, if they will only study the present situation with a clear and unbiased mind.

The power is all on the pharmacist's side, as is also the justice, if he would but realize it. The moral and financial gain and prestige that are his as the result of well-directed effort are immeasurable.

Doctors Want Real Medicines.

In a section of country where propaganda work has been carried on for a reasonable length of time, you can always find the physicians thoroughly

alive to the value of the druggists' propaganda efforts and they are even stimulating the said druggists to further and greater efforts in this direction.

From this we see that the physician needs just such enlightenment as the N. A. R. D. is supplying him with and he is thankful to get it.

Why? For the simple reason that he is getting actual bona fide information about real medicines which, for some reason or other, he did not heretofore possess, and it fills a long-felt want in his daily practice.

The following letter from the Dios Chemical Company, St. Louis, Mo., may illustrate this more fully, showing as it does, the inevitable fact that the propaganda is pinching most severely:

THE NOSTRUM MAKER'S WAIL.

"Dear Doctor:—

You will pardon me for addressing you personally, but whereas, you with many other physicians in your state, whom I believe have used Dioiviburnia, Neurosine and Germiletum with a degree of satisfaction, therefore, I hardly think you would allow any man or association to direct you what you should or should not prescribe. YOU ARE YOUR OWN JUDGE. If you are not yet convinced, an impartial trial will secure for you satisfactory results.

Should you from any cause have discontinued the use of Dioiviburnia, Neurosine and Germiletum, I respectfully request of you, Doctor, to kindly consider the results you have obtained in the past with these remedial agents. If you do not remember, I will mail you an order on the nearest wholesale druggist for FULL SIZE BOTTLE of each, Dioiviburnia, Neurosine and Germiletum, FREE OF CHARGE if you so indicate on enclosed postal.

Doctor, you are undoubtedly aware that many retail druggists make more money selling PATENT MEDICINES, commercial drugs and mixtures of their own (dispensing) naturally they will dissuade doctors from using ethical Proprietary Medicines, which they are not inclined to keep in stock without you insist on your prescriptions being filled with the identical article prescribed, PERMITTING NO SUBSTITUTION, which you may not be aware is on the increase, you yourself, recognize should not be encouraged if uniform results would be obtained.

Desiring to conform to the wishes of the doctors, we have DISCONTINUED BLOWING NAMES OF OUR PRODUCTS IN BOTTLES. You will note indications for which Dioiviburnia, Neurosine and Germiletum are efficient, dose and

COMPLETE FORMULAS in enclosed leaflet.

You can rest assured that Dioiviburnia, Neurosine and Germiletum shall be kept up to the standard of efficiency and that we do not in the least degree cater to the laity and always furnish complete formulas to the Profession only.

Very truly yours,

J. H. CHAMBERS, President."

Notice the clever way the letter states: "I hardly think you would allow any man or association to direct you what you should or should not prescribe."

And then, by certain specifications, insinuations, mud-throwing and various other tactics, including free goods from the wholesaler, THIS NOSTRUM MAKING FIRM DOES NOT DIRECT BUT BEGS THE DOCTOR TO PRESCRIBE THEIR ETHICAL (?) PROPRIETARY MEDICINES.

Again, we wonder, if propaganda work did not have something to do with the "discontinued blowing names of our products in bottles."

We can only say what we have said before, viz: that the N. A. R. D. is in this fight to a finish with the nostrum maker, AND MAY THE BEST MAN WIN.

And if the weak literary efforts of this firm in calling the druggist a substitutor should fail, if the physician is fully convinced that honest U. S. P. and N. F. medicines are doing better work than their nostrums, as the above letter would seem to indicate, we can only feel sorry for them and say, "we told you so."

From past experiences we can say, truly, that when a physician has been weaned away from nostrums to the use of U. S. P. and N. F. medicines, nothing can turn him back to the unethical and unscientific hap-hazard method of prescribing secret compounds.

Up to the Pharmacist.

However, a pharmacist cannot afford to rest upon his laurels if he has won a few victories. He must continue to improve his position and keep hammering away at the good beginning he has made and never for one instant must he neglect the quality and preciseness of all his official prepara-

tions, also such drugs, chemicals and meritorious galenicals that are not official.

CHAPTER XLI.

As being of great value to all pharmacists, the author has repeatedly called attention to the extravagant claims of cheap medical journals and the still cheaper nostrum makers in parading their ethics (?) before the medical profession.

While no one claims that the National Formulary is perfect, every rightminded and sensible pharmacist and physician **does know** that the preparations in it are, as a rule, good ones.

How They Know It.

The pharmacist knows it from a pharmaceutical standpoint, for he has made them, and has been instrumental lately in bringing them to the attention of the medical profession.

The physician knows it from a therapeutical standpoint, for he has used them in his practice and has found them to be good.

In fact, he has found them superior to anything of a similar nature he has ever used, and he is not going back to any of his former methods.

Therefore, all remarks detrimental to this book and its contents are extremely ill-advised, unjust and unimportant. The nostrum manufacturers and their editorial employees, (the so-called medical writers for some of the house organs) know it also, and for this very reason they must "write" against it, undervalue it, cheapen it if they can, do anything to detract from its value in the eyes of the physician, **because it is hurting their business.**

Did any of these selfish manufacturers, or these puppets who go by the name of "medical editors," ever say a word either for or against the National Formulary when it was in its second or even its first edition?

These former editions surely were more full of inaccuracies than the third edition, and certainly gave more cause for complaint.

Knocking Only Since They Are Shown Up.

No, it is only since the N. A. R. D. has begun an active and aggressive campaign to familiarize physicians with the preparations of the U. S. P. & N. F. that these clever nostrum makers have cried "stop thief," "you are stealing our property," "your book is a fraud," and many other gentlemanly (?) epithets.

It is only since numerous frauds among these would-be ethical nostrums have been exposed as arrant humbugs that the croakers are yelling, "quit, we are better than you," "you have axes to grind," and so on.

It is only since the physician has shown a real interest in therapeutics which his college neglected to instruct him in and became anxious to find the real truth about real medicine, that these would-be manufacturers of cure-alls are shouting "your N. F. is a mistake," "a conglomerated assortment of substitutes," and such silly stuff.

Wail on and condemn the N. F. to your hearts' content if it does you any good. Call the druggists substitutors and then run away when you cannot prove it, as these things are expected, but they will not be put up with much longer by the honest pharmacist.

An Awakening.

The pharmacists of to-day are becoming rather wide awake, and so are the physicians, and they will know the facts about medicine. And when they do know the facts, they let the nostrum severely alone—and that is why the nostrum-gentlemen are complaining. Perfectly plain and simple, is it not?

The dark-age relic of secrecy is a thing of the past and these gentlemen might just as well look the future squarely in the face and realize it.

Some may linger for awhile longer and do some spasmodic kicking, but it will soon be over. Pharmacists are fast beginning to realize that their real bread and butter lies in their laboratory work, in the work for which they have fitted themselves and for which the state gives them special privileges.

They now recognize the fact that pharmacy is a profession for pharmacists, and that nostrum makers and non-pharmacist physicians are intruders in their profession.

And when the pharmacists begin to chop, the chips will fly thick and fast. They are thoroughly alive to the deceit and fraud heretofore practiced upon them, and upon the physicians even more so.

Even the sum total of the powerful interests which the nostrums represent, if they were ten times as great, could not stop the onward march of the propaganda movement for reform in medicine.

Pharmacists Recognize the Evil.

Pharmacists are looking at this evil on a broader plane than formerly, they recognize its baneful influence now in all its hideousness—and that is why they will fight it to the death.

All they need is the hearty and loyal co-operation of the physician, which is only too gladly given when the pharmacist shows his capability and willingness.

His capability is manifested in the production of his preparations and his willingness shows itself when he recognizes the evil influence of the nostrum.

Let the good work go on in spite of the croakers.

CHAPTER XLII.

If we should put an outsider, an innocent third party, in possession of all the facts, pro and con, about the dispensing physician and the prescribing pharmacist, and then ask him to give an unbiased opinion as to the relative merits of each, what would his answer be?

This question was recently put to twelve men, representing twelve different callings—a butcher, a grocer, an engineer, a tailor, a dry-goods merchant, a carpenter, a painter, a day laborer, a brakeman, a florist, a glass-cutter and a blacksmith.

The verdict of each and every one was substantially the same, and was this: "I do not see how it is possible for me to trust either, knowing the risk I am running, but if what you say

about both is true and I can realize that it must be, why don't you people work together."

A Remarkable Answer.

To give this answer its requisite force, it is to be noted that each party was asked the question when alone, therefore it was an unprejudiced answer. It is remarkable, indeed, that each answer was practically the same.

It seems, therefore, that when those people who are directly interested in the work of the pharmacist and the physician, **the ones who pay the bills for services rendered in both instances**, are of one accord and feel that the two professions should get together, that this conclusion is the most consistent and also the most feasible one.

It often happens that an outsider, a stranger, who looks at things differently than we do, is able to see faults and point out ways of correcting them.

And many druggists and doctors who are as yet not inoculated with the get-together germ, would do well to become infused with it.

The people, that great mass of humanity who are paying for the services of the pharmacist and the physician, demand it. They are not demanding it outright in so many words, but indirectly. And it is their due.

Great Need of Getting Together.

A pharmacist is no physician in any sense of the word, neither has the physician any claim to usurp the functions of the pharmacist, a fact that any real thinking man can see and understand.

And because the two professions are so intimately interwoven they must get together and work in harmony in the truest sense of that term.

If it is not done, we shall simply help more people to break away from medicine altogether and become "fad-dists" of one kind or another, and the age of "therapeutic nihilism," the death of the use of drugs, will become more and more of a reality.

And why would it not? Here is a patient, on the one hand, coming to the pharmacist to be cured of a disease of which neither knows anything; and, on the other hand, we have a patient going to a physician for medicine,

about the preparation of which he knows little or nothing.

Can such patients be assured of the service to which he is justly entitled? Most assuredly not. And you can't fool all the people all the time.

These people are in exactly the same position as regards medicine as they are regarding many other transactions in which they come out "second best," and they feel that the offending druggist or doctor "has sold goods under false pretense," which, in fact, he has done.

Man for Man.

Now, there are but few physicians who will not listen to a good heart-to-heart talk from the druggist, and every one of the remainder—say 99 per cent—can be impressed with the soundness of your arguments and the righteousness of your position.

Draw an imaginary line and assure your physician by word and deed that you will stay on the pharmacal side of that line if he will stay on the medical side.

To illustrate both practically and theoretically, the existing conditions, let us take a small town having one drug store and one dispensing physician.

There are 200 families in the village, one-half of whom allow the druggist to treat all their ailments, and the other half go to the physician to get whatever they need.

In the course of a year, some 465 calls are made on the druggist for advice and treatment, which in no one year will net him over \$300 clear profit, figuring an actual profit of over 60c on each transaction.

The physician has some 600 calls for medical advice and medicine during the year. The profits on the medicine he gives his patients (exclusive of the \$1.00 for the office call) are rarely over \$400.

With these conditions in actual existence, few of the people in the village get exactly what they need. This any reasoning person can readily see who understands the situation.

Net Gain All Around.

Now, Mr. Pharmacist, to forever do away with the idea that this "false pre-

tense" business is profitable, just look at the other side of the picture—the get-together side.

The 465 calls you have will be turned over to the physician and you lose the \$300 net profit on them. But as he now has a total of 1065 calls, we will say that he writes only one prescription for each, on which you make only an average profit of 40c per prescription. This amounts to a profit of \$426, a clear net gain over your "prescribing" method of \$126.

The physician loses the \$400 profit on his dispensing business, but gains \$465 from the added office calls (at \$1 each). Hence his clear net gain over his dispensing method is \$65.

This may be theory, but the get-together movement will make it intensely practical.

The actual figures each pharmacist and each physician can supply to their own individual case, but the result will generally be the same: **Added profit for both and better service to the people.**

CHAPTER XLIII.

The fifty-seventh annual meeting of the A. Ph. A. at Los Angeles, Cal., August, 1909, calls to mind that this Association issued the first edition of the National Formulary in 1888; twenty-one years ago.

Since that first edition it has been revised twice and at the present time is being revised for the third time.

This now legal standard has been of great assistance in furthering the propaganda for reform in medicine, which at the present time is carried on with such vigor throughout our country by the pharmacists.

Revising the N. F.

The present revision is carried on by a committee of fifteen members, whose ability in producing a satisfactory volume is beyond question.

The labor incidental to the revision of such a book as the N. F. is a stupendous one, requiring as it does a great amount of experimentation and other detail work.

The very nature of the book renders this necessary, as constant progress

is being made, both in pharmacy and medicine, and the work is intended to be as modern and complete as possible.

The suggestion from the present committee that the revision committee be made a permanent committee is a valuable one. There then will be more unity, consistency and thoroughness in the efforts expended.

Why a National Formulary.

In the preface to the first edition we find the following statements as illustrating the pressing needs of a formulary of this kind:

"It is well known that the remedies for which the Pharmacopoeia prescribes definite standards, constitute only a limited portion of the resources of the medical profession in the treatment of the sick.

"Without referring to the more ephemeral (short lived) preparations, or to such as are of a proprietary character, or are used by the public for self-medication, there is a large number of others which are more or less frequently prescribed by physicians, or demanded by the public, but which are not recognized by the Pharmacopoeia, either because they were not deemed of sufficient importance by the revisers, because they originated subsequent to the appearance of the Pharmacopoeia, or for other reasons.

Formulas Often Varied.

"Owing to the absence of an authoritative standard, many of these unofficial preparations have been and are being made, after different formulae and in varying strengths, so that pharmacists are compelled to procure and keep on hand a variety of brands of what is intended to be one and the same preparation, to satisfy the demands of their patrons, professional or otherwise.

"The evils arising from this condition of things are so well known and so far-reaching in their results, that there is no need of any argument in favor of a plan which may palliate the existing evil, chiefly caused by a lack of uniformity, or the want of a common standard."

And thus the National Formulary was born. And to what a powerful emissary it has grown since 1888. As its power is more and better understood, it is in the same ratio increasing in value.

Becoming a Power.

Of recent years this power and value has become plainly apparent, more so than ever before, largely on account of its intrinsic value and in a measure by the increasing encroachment on the field of medicine of hundreds of worthless nostrums.

The manufacturers of these nostrums never have been and are not now ashamed in stultifying themselves in belittling and condemning the work, calling it a mistake, a book of substitutes, etc.

Pharmacy, fortunately, does not depend upon these critics for progress, otherwise the outlook would be dark and dreary, indeed, and neither a U. S. P., nor an N. F., would be in existence today.

It is unfortunate, indeed, but of course to be expected, that those very people, people who have profited most by the existence of the National Formulary heretofore, are the very ones who are now condemning it, while it is being used for legitimate purposes and those only.

No Imitation or Substitution Formulas

In this connection we cannot refrain from bringing to the attention of our detractors the following excerpts from the preface to the second edition of the N. F., namely:

"The demand for additional formulas has been carefully considered by the Committee. This demand, unfortunately, was in most cases for working formulas for preparations that have come into current use **under fanciful trade names**, and for which no formulas, other than obscure indications of composition borne on the labels, are known to pharmacy.

"The Committee did not consider it within the scope of its duties to devise and construct formulas for such preparations, **the more particularly since their composition is only imper-**

fectly given and because the demand for them seems to be dependent upon the skill and industry with which they are brought to the attention of the medical profession, rather than upon any intrinsic superiority that they possess over other medicinal agents.

"On the other hand, preparations for which working formulas were suggested to the Committee, were uniformly subjected to critical experiment, and their formulas embodied in the revised Formulary."

A Valiant Defender.

One of the most valiant defenders that the National Formulary has today is the *Journal of the N. A. R. D., NOTES*, which never hesitates to defend any and all attacks upon it, if unjust ones, and is doing its utmost in making it more perfect, better understood and better known to the members of the medical profession.

These N. F. preparations, as those of the U. S. P., are not intended to supplant every other known form of medication or treatment which a physician may desire to use.

The aim of the National Formulary is to make the preparations official in it, uniform, standard, reliable, presentable, palatable and of such therapeutic efficiency that the physician is able to depend upon them.

More power to the A. Ph. A. and its efficient revision committee, that the work may finally blossom into a "very nearly" perfect volume.

CHAPTER XLIV.

This chapter on propaganda matters, while naturally of direct interest to every capable pharmacist, is intended more especially for such members as are officers of associations, in calling attention to the fact that an increasing number of pharmacists who are alive to the benefits of intelligent propaganda work, are demanding a means whereby the general public can be reached.

Suggestions.

Some have suggested a yearly almanac, which is a good idea; some suggest a newspaper campaign, while

still others—and a majority—suggest a printed circular, to be mailed at regular stated intervals from N. A. R. D. Headquarters, mailing lists to be furnished by the individual druggists.

A Live Issue.

This issue is a live one; it is also timely. There are numerous so-called physicians who have no right to practice the honorable profession of medicine and who have absolutely no standing with the large class of conscientious physicians who treat their patients with only one purpose in view, namely, to cure them of their ailment as quickly and as scientifically as possible.

These so-called physicians are selling medicine "under false pretense" and are the ones that will be reached, indirectly, through the public, by means of this educational movement.

There is not the remotest doubt as to the efficiency of the plan, and it will evidently have better results at smaller expense than will an endeavor to legislate the dispensing physician out of existence.

When the prescribing physicians are once in the habit of treating disease successfully with the simple but standard preparations of the U. S. P. and N. F., their experience and success will be such that the dispensing physicians will have little, if any, practice left—practice which will call into action the habit of self-dispensing.

What the Pharmacist Wants.

And just this is what the pharmacists want. They want "pharmacy for pharmacists," and this education of the public is calculated to lessen the evils brought about by the intruding dispensing physician.

No doubt there is a considerable number of these physicians that send some trade to the pharmacist as regards sickroom necessities, such as atomizers, syringes, bandages and the like, that the physician does not carry in stock, but this has no great bearing upon the question. The main point is this: **The public does not get the service it so badly needs and to which it is entitled because it foots the bills, when the dispensing doctor or the**

counterprescribing druggist are doing business.

If the two would get together and work in harmony both would make more money and the public would get its just desserts.

No one can disprove these facts.

Stand Up for Your Rights.

Pharmacists should realize that they are fighting for their honor, for the honor of pharmacy, and last but not least, for the welfare of their families.

Propaganda effort by the pharmacist along the line indicated is as much of a power in turning the people from the dispensing doctor, or making of him a prescriber, as is the U. S. P. and N. F. propaganda a power in turning the prescribing physician from nostrums to safe and sane prescribing.

The two naturally would work in harmony and both for good. The idea is a sensible one, and it is also practical.

We trust the various officers will give the matter some consideration, and while the proposed campaign doubtless will increase the pharmacist's income, the cost to the individual pharmacist will be brought down to a minimum.

A circular letter, either printed or typewritten, coming through the mails regularly every month or two, and containing truthful and easily understood reasons why the public should treat with intelligent prescribing physicians and honorable pharmacists, will in the course of time have its desired effect.

Better conditions are coming sooner or later, and it is just as well to take time by the forelock and establish a precedent now.

CHAPTER XLV.

"Pharmacy for pharmacists." This should be our slogan. Others who are intruders in an honorable, upright and exact profession should be driven out.

The following letter from Geo. F. Loar, of Lewiston, Ill., treats of a subject near and dear to the heart of every pharmacy-loving pharmacist.

It is full of food for thought and in

line with what a large number of pharmacists are eagerly longing for—"an education of the public to correct ideas as regards medicine and the treatment of disease."

Mr. Loar writes:

"I have been very much interested in all that you have stated in regard to plans and methods to use in getting the doctor back in line with prescription writing.

Ground Well Covered.

"Your various suggestions and best methods to use have covered the ground pretty thoroughly, and both the doctors and the druggists should be well informed on the subject. The plans presented have no doubt furnished food for thought with a great many physicians who, after giving the matter some thought, have changed their method of doing business from dispensing to prescription writing.

"Others have read the same articles and heard the same arguments without any favorable impression being made upon them—being wise in their own conceit—and they have refused to listen or take heed. Upon this class of physicians all arguments or suggestions from the druggist's end of the line will prove futile.

"So far all suggestions have been from the druggist to the doctor or in trying to reach the doctor through the druggist. How about the other end of the line?

"As long as the patients call for these doctors and they are in a measure successful, financially, they will not stop to consider any other method of doing business.

Showing Up the Dispensing Doctor.

"But, on the other hand, suppose a shift is made in the plan of education; suppose the people are shown that the successful physician is the one who prescribes—and why? Show them that the dispensing doctor is the one that substitutes instead of the druggist—and why and how?

"Show them that instead of getting their medicine at a cheaper price as the doctor leads them to believe, they are paying more and buying the cheap-

est article on the market in addition to paying well for professional (?) services, while some pharmaceutical house has furnished whatever brains were needed.

An Opportunity.

"There is a chance for an exceptionally strong letter, one that is published by the N. A. R. D. at a reasonable price and furnished to druggists who will mail them to all of the people in their territory.

"This cannot help but draw trade to the physicians who write, and when the dispensing doctor sees that he is losing money by his manner of doing business, he will change and not before.

"I believe that a great good can be accomplished by pursuing this plan, at least it will reach a class of physicians that the other method would not reach.

"I believe that because the people in general do not understand the true conditions, they do not think of the importance of calling a physician who has a conscientious druggist and a well-stocked store at his back and one who can and will prescribe the best remedy that is indicated in the disease with which the patient may suffer. If the committee in charge will investigate along this line, I think they will see the value of some literature bearing upon this part of the subject."

This plan may appear radical to some timid druggists who would not do a thing to even ruffle any one's feelings, no matter what the cause or the injury lack of action would produce. The great body of up-to-date pharmacists, however, who can see the handwriting on the wall and can realize that some feelings will have to be ruffled, some hearts must be made sore, that they themselves may regain some of their rights, and suffering humanity be given a square deal, these will not consider it radical.

They will see in it simply a means to an end and will go ahead, do what is necessary, and when it is done, even these active ones will wonder why it had not been done before!

'Tis ever thus—the greatest wrongs, the greatest humbugs are borne to the point of oppression and then the simplest kind of a simple remedy will wipe them out.

So in this case, the education of the people will accomplish what no resolutions or legislation can—the making of expert pharmacists and physicians.

CHAPTER XLVI.

Some pharmaceutical houses are not dealing fair and are fast getting into the same class as numerous proprietary medicines makers, whose sole ambition seems to be summed up in these three words, "Cut down expenses."

No matter what happens to the so-called medicinal preparations they so loudly and so brazenly flaunt and advertise to pharmacists and physicians as "elegant pharmaceuticals," expenses must be cut down at all hazards.

The following communication from a western druggist gives emphasis to this condition, but names for the present are withheld.

Accidentally Discovered.

"While filling a prescription recently for Compound Cathartic Pills, Improved, Gelatin-Coated, with the product from a large manufacturing house, one slipped out of my fingers, rolled on the prescription counter and into some water, a few drops of which happened to be on the counter.

"Upon picking it up, was surprised to find the coating come off and stain my fingers a jet black. Thinking this rather peculiar, I went through a similar experiment with all the gelatin-coated pills of this house that I had on hand, and with each one I was able to write legibly on a piece of paper, immediately after moistening it.

"Other makes of pills, treated similarly, would not make a mark, but would become very slippery, indicating that gelatin was used and not lamp black and glucose.

"Since this discovery, I have learned that this old and once respected house is now owned and controlled by a

bunch of greedy, covetous and niggardly 'cut-down-expense' gentlemen.

"If these people sell, and advertise to sell, such a coating as gelatin-coated,' what must the rest of their line be coming to, especially those numerous preparations in which fraud and adulteration are not so easily detected.

"For myself, I have put them in the pigeon hole with other fake concerns, not wishing to handle any goods that I cannot conscientiously recommend as being true to label.

"I will admit that this house once was the proud possessor of an untarnished name, an enviable reputation and a line of pharmaceuticals that were very nearly true to label.

"But it is now doing business on this reputation alone, and with this high and mighty position as its only asset, is profiting handsomely by making the pharmacists and the physicians believe they are still getting quality, skill and experience."

How About the Price?

To add color to these fraudulent claims, we may add that it seems very peculiar that these pills, marked U. S. P., can be sold at the prices mentioned in various lists, from which remarkably large discounts are frequently allowed.

The U. S. P. Compound Cathartic Pills cost for ingredients alone, without any gelatin or cost of labor added, 56c for each 500 made.

This price is based on very favorable wholesale quotations of pure drugs, as follows: Compound extract of Colocynth, \$2.70 per lb; Calomel, 83c per lb; Resin of Jalap, \$9.40 per lb., and Gamboge, \$1.30 per lb.

A high net wholesale price of these pills is 53c per 500 in pound lots and very often a low price is made of 36c per 500 in pound lots.

The Fraud Exposed.

Now, if this retail price of 36c to 53c includes the cost of drugs, cost of gelatin, cost of labor and a profit besides, and the U. S. P. product costs 56c for drugs alone, what conclusion will any sane man arrive at?

Simply, that not only expenses have been cut down to produce profit, but that the cheapest of cheap drugs or substitutes have been employed in manufacturing, for in no other way is it possible.

The aim of such houses is not "how to produce the best possible preparation therapeutically" but "how to make an elegant preparation that will just pass muster" when the most blatant claims for it have been made, at the cheapest price possible.

Experience is necessary for this, of course, and competition has made these experienced people past-masters in the art of how to bunco the pharmacist and the physician.

Every capable registered pharmacist would certainly like nothing better than working in harmony with reputable manufacturers, for whose activities a great field exists, but a parting of the ways is surely coming and coming swiftly, if these cut-down-expense manufacturerers do not stop their policy of furnishing cheap and fraudulent preparations.

The pharmacists not only want preparations that are "true to the label," but they want a preparation that contains exactly what it should contain, the very best possible drugs.

Pharmacy for Pharmacists.

When all is said and done, it is the pharmacist who should, after all, manufacture the medicine that he dispenses. He is trained for it, the public expect it, the physician should demand it and the state gives him, and him only, the right to do so.

Why, then, should the pharmacist buy his preparations, even the most simple ones, when so many manufacturing houses have shown him that his orders will be filled by preparations made according to their ideas, and not with what he (the pharmacist) desires?

Duty demands that the pharmacist buy only the drugs of superior quality and transform them into preparations in his own shop or laboratory.

This is all there is to the successful arrival at both professional and financial gain, apart from letting the physi-

cian know why you are the logical distributor and manufacturer of medicines.

CHAPTER XLVII.

When we consider how rapidly we have been drifting towards so-called therapeutic nihilism, it would be interesting to watch and wait for the end, if the end would not be so serious from the standpoint of pharmacy and medicine.

We can not afford to wait for this end; that is not what we, as pharmacists, are here for. We are here to prevent this consummation of evil in medicine and to prevent people from becoming, according to the standards of our profession, their own worst enemies.

Drugs All-Sufficient.

The profession of pharmacy maintains that drugs and medicines are for the cure of disease and sickness, and if rightly and diligently used will do so in almost every instance, provided the pharmacist and the physician are what they should be, experts in their profession.

If then, people stop using medicines for the cure and alleviation of sickness and disease, there are reasons for it, and it is our duty to inquire into these reasons.

If the people want nostrums and the physicians prescribe nostrums, there is a reason for this also.

If the people demand medicine from the doctor and the doctor furnishes it, there is a reason for it. So also, if the physicians' prescriptions are compounded in hospitals and department stores, there is a reason for it. The reason for all these adverse conditions to the intelligent practice of medicine and pharmacy is the lack, somewhere, of expert pharmacists and physicians. People will not readily change their mode of living, unless for good and satisfactory reasons, likewise they will not relinquish the use of medicines for curing disease, if this method has been satisfactory in the past.

Handicaps to Scientific Medicine.

We must admit that two important

factors exist, to which the existence of such a condition as "therapeutic nihilism" owes its origin.

These two factors are the existence of the immense number of fraudulent nostrums and a lack, in many localities, of expert pharmacists and physicians.

Both of these factors, neither of which represent the highest degree of excellence in medicine are responsible, at least in part, for the prevalence of other modes of treatment for physical and mental disease.

We have no right to condemn the, to us, irregular methods of treatment nor the people who believe in them, but we do have a right to go ahead and put medicine and pharmacy on such a high plane of excellence that the best possible results may be obtained from their practice.

Not only have we the right, but it is our duty to do this, and the only requisite necessary is an abundance of expert pharmacists and physicians.

For a person already a pharmacist it is a very easy matter to become an expert. The first and greatest factor in becoming an expert pharmacist is to **prepare all your preparations from a superior grade of drugs and chemicals.**

The physician will soon be able to tell you whether you have succeeded in transforming the therapeutic activity of your drug or chemical into the preparation.

Removing the Handicaps.

If you have, well and good. You have then destroyed one factor that makes possible "therapeutic nihilism," namely, the nostrum; with its exaggerated claims and impossibilities.

If your preparation is not active and does not represent the highest excellence, the highest quality possible, you must keep at it until it does.

This same activity, when carried on for a sufficient length of time, when both the physician and the public have optical proof of the superiority of the expert pharmacist, will eliminate the imposters and charlatans in both pro-

fessions, and thus will be destroyed the most potent factor that makes for "therapeutic nihilism."

So, after all, we have the betterment of our position as a merchant and as a professional worker in our own hands.

The conditions summed up in as few words as possible, are simply these, speaking generally and leaving out the exceptions:

The Plain Facts.

The physician, after years of unsatisfactory acquaintance with the nostrum, is at his wits' end as to what to prescribe. He is without medicine, and he is waiting for some one to offer him real medicine. He needs it badly and has needed it for years. Who will furnish it?

It is for this reason that the N. A. R. D. has undertaken the herculean task of providing its members with the necessary knowledge, facts and instruction to bring about better pharmacy and the destruction of "therapeutic nihilism," so far as it is based upon errors in the practice of pharmacy and medicine.

The N. A. R. D.'s success in the movement has been such as to warrant the active co-operation of every pharmacist in the country, for it makes "expert pharmacists" of them and an expert pharmacist is usually appreciated and kept busy.

CHAPTER XLVIII.

The following is a rough draft of the seventh letter mailed in September, 1909, to physicians:

The Seventh Letter.

Dear Doctor:

We take great pleasure in resuming correspondence with you on the subject of "getting back to first principle in medicine."

We are enclosing a booklet, entitled "Therapeutic Information." Kindly look it over and familiarize yourself with it. We believe you will find in it much of interest and that it will be a help in your daily practice.

The preface of the little volume also contains valuable information, which, if heeded can only result in advantage to members of the medical profession.

The nostrums are fast losing popularity as their inconsistency and false claims become more apparent, and the ethical and standard preparations of the U. S. P. and N. F. become better known.

We would call your particular attention this month to three most efficient preparations appearing in the booklet, as follows: Syrupus Hypophosphitum Compositus, U. S. P., on page 19; Infusum Digitalis, U. S. P., on page 12, and Petrolatum Saponatum Liquidum, N. F., page 31.

With kind regards. I am,

Sincerely yours,

Thos. H. Potts, Secretary.

The Insert.

The insert accompanying this letter is a 32-page booklet, in the nature of an epitome of the U. S. P. and N. F., containing a short description of about 100 preparations as regards dose, uses and general characteristics. Its title is "Therapeutic Information."

Physicians will find much in this little booklet of interest and it will doubtless prove a great factor in the prescribing of U. S. P. and N. F. preparations.

The preparations are grouped into classes, according to their therapeutics and this will be an added factor in helping the physician to become better acquainted with the standard preparations of the U. S. P. and N. F., than which there are none better.

The three preparations alluded to in the letter and with which you will sample your physicians this month are described in this booklet, as follows:

INFUSION DIGITALIS, U. S. P.

Dose—8 Cc. (2 fluidrams).

Uses—Cardiac Stimulant, Diuretic.

An efficient preparation, representing the aqueous extract of 2 grains Digitalis to each dose, 10% Alcohol and 15% Cinnamon Water.

This infusion is pre-eminent as a diuretic in cardiac and renal dropsy.

The official tincture (*Tinctura Digitalis*, U. S. P.), Dose 1 Cc., or 15 minims, contains the most potent principals and is a powerful cardiac stimulant.

SYRUPUS HYPOPHOSPHITUM COMPOSITUS, U. S. P.

Dose—8 Cc. (2 fluidrams).

Uses—A valuable nerve tonic in assisting the general nutrition.

Each dose contains as hypophosphite salts, $4\frac{1}{2}$ gr. Calcium, $2\frac{1}{4}$ gr. each Sodium and Potassium, $\frac{1}{4}$ gr. each, Iron and Manganese, $\frac{1}{8}$ gr. Quinine and 1-80 gr. Strychnine.

A permanent and palatable preparation.

PETROLATUM SAPONATUM LIQUIDUM, N. F. (Liquid Petrox.)

A yellow, oily, penetrating liquid, obtained by saponifying Liquid Petrolatum, 100 parts, with Oleic Acid, 50 parts, and Spirit of Ammonia, 25 parts.

A modern pharmaceutical preparation, to be used for applying such rubefacients as Camphor, Menthol, Chloroform, Methyl Salicylate, Thymol, Salicylic Acid, Phenol, Turpentine, Creosote, Guaiacol, etc., which dissolve in it perfectly.

One of its most important functions lies in the fact that Iodine readily dissolves in it to the extent of 10%, making a solution that causes little or no stain, and is easily washed off with soap and warm water. This will obviate further necessity of making the numerous unpharmaceutical and unreliable "colorless iodine" preparations.

These official preparations should prove of great value to the physician, as they are most excellent ones.

The Liquid Petrox will prove especially valuable to our medical friends, as it offers them an excellent means for the local application of numerous drugs, and one that fills a long felt want.

CHAPTER XLIX.

The function of the pharmacist is in the making of reliable, uniform and active medicinal preparations.

The N. A. R. D., through its national propaganda advertising campaign, calls the attention of the physician to these standard preparations, giving reasons why they should be preferred to others.

This campaign of the N. A. R. D. is not only a campaign against the nostrum; it is a more far-reaching one, as it goes back to first principles in medicine.

It is a peculiar fact that the nostrum is always a "combination" of most wonderful healing drugs, prepared in a most skillful and scientific manner, far beyond the ability of the average pharmacist, etc.

Official Preparations are Superior to All Others.

You never heard of Hydrochloric Acid as a nostrum, nor the Deodorized Tincture of Opium as a specialty, yet in these two official preparations we

have, respectively, the best digestant, and the best analgesic medicine known at the present time.

This is one of the reasons why the preparation of the N. A. R. D.'s booklet, "Therapeutic Information," is considered so essential at the present stage of the national propaganda movement.

It brings to the attention of the members of the medical fraternity the real facts, the naked truth, about the absolute superiority of the real, basic and fundamental medicines of the U. S. P. and N. F.

It teaches him the fact that no nostrum can be superior to these official preparations, no matter what the claim of the secret remedy may be.

The Function of the New Booklet.

The conclusion which the physician must reach after a careful perusal of this booklet is that if, for instance, a secret compound, called "Cardiaca," contains Squills and Digitalis, this secret compound can have no other therapeutic virtue than is possessed by Squills and Digitalis, no matter what the manufacturer claims.

The two preparations mentioned above, Hydrochloric Acid and Deodorized Tincture of Opium, are treated as follows in this booklet:

ACIDUM HYDROCHLORICUM DILUTUM, U. S. P.

Dose—1 Cc. (15 minims), well diluted, after meals.

Uses—The most reliable digestant known.

Contains 10% of absolute Hydrochloric Acid and 90% of Water. The reason why this, the most valuable of all digestants, has not been more extensively employed, is doubtless because it is not a proprietary article and no "nostrum interests" can be served by recommending its use.

TINCTURE OPII DEODORATA, U. S. P.

Dose—0.5 Cc. (8 minims).

Uses—Analgesic (the best in our Materia Medica), anodyne, antispasmodic, hypnotic.

Each dose represents 4/5 grain Powdered Opium (containing 1/10 gr. crystallizable Morphine).

Therefore, you will see how important it is for you to make these preparations with the greatest of care and accuracy, that they may be exactly

right and a bona-fide article as required by the Pharmacopoeia.

Then, if you find that the physician prescribes these and other preparations more and more, you will understand why the N. A. R. D., through its able director of propaganda affairs, Mr. Bruder, and the valuable U. S. P. and N. F. Committee has gone to such expenditure of time and labor in preparing this booklet.

Making Your Business Pay Better.

It is done for no other reason than to make your particular drug business more profitable for you, while at the same time it is elevating your profession to a more scientific one and promoting the human weal.

All that is required of you is that you practice your profession strictly to the letter in the manufacture of all official preparations, so that when the physician does prescribe them, he will never be disappointed in the results he ought to obtain.

Pharmacists should realize that they are at present at a crisis in the most critical era. Every intelligent physician will tell you that. Furthermore, the entire medical fraternity of this country has its collective eye upon the retail pharmacist.

The physicians have been fooled so long and so often with the fraudulent nostrums that they are at their wits' end what to prescribe.

The Physicians are Waiting.

They are waiting for some one to offer them real medicine, and they are awaiting the action of the pharmacists.

It is, therefore, to be sincerely hoped that not a single pharmacist will be found wanting in this most important and progressive movement that means so much to them.

Let your name, as a representative pharmacist, go down in history as one who did his level best in placing pharmacy on the highest level of efficiency by doing only your plain, honest duty in making your preparations absolutely perfect.

As Mr. Bodemann has so aptly expressed it, "Be honest to thyself and

it must follow that thou art honest to others. That's the essence of propaganda."

It is a condition we are facing, a real condition, and not a dream or theory. The pharmacist must make himself felt in behalf of his own profession, for if he does not, it's good bye U. S. P., N. F. and physicians for some time to come. At least, we will not very soon again have such a favorable opportunity as now at this critical period.

CHAPTER L.

Every get together meeting of pharmacists and physicians is worth dollars to every pharmacist in the town where the meeting is held.

The time is ripe for get together meetings for several reasons, most important among these being the fact that physicians, after many years of unsatisfactory acquaintance with the nostrum and but a very meagre knowledge of official preparations in general, are at their wits' end as to what to prescribe.

We believe that pharmacists generally do not themselves realize that this grave condition actually exists at the present time.

But it does exist and it is sincerely to be hoped that every pharmacist will make himself familiar with the present conditions.

There is nothing dreamy or theoretical about the matter—it is a terrible reality. It should compel pharmacists to put forth most strenuous efforts in behalf of good pharmacy, much more than they have done in the past.

The Actual Conditions.

The condition, shorn of all superfluous verbiage, boiled down and filtered is this: The physician admits that a sufficient knowledge of therapeutics, materia medica and prescription writing, adequate to his needs, has not been taught him in his school, the nostrum maker has made the physician believe for years that only he can make scientific medicines, and now the physician has discovered the fact that the nostrum maker lied and that the nostrum is not to be trusted.

There, Mr. Pharmacist, digest that thoroughly, for that is the condition that confronts you. Do not let this fact get away from you, for the sooner you realize the condition you are in, the better for you and for all concerned.

Now realizing that this condition is true, what should you do? What must you do? What is your duty?

What You Must Do.

You must go to your physician, either as an individual, or collectively at a get together meeting, and prove to him that **you**, are capable of making real medicine, actual bona-fide official preparations, that are the standard by which almost all medicines must be gauged and for which he has vainly looked for, for years.

Prove it in a manner that will leave no room for doubt, for he is anxiously, yes hungrily waiting for some one to offer him real medicine with which to combat disease.

You have them and in fact you are the only one fitted by education and experience to prepare them and the state has granted you the special privilege for doing so.

Make use of that privilege, as an educated and qualified worker and let it bring to you what it was intended it should, a reward both financial and professional, for services rendered.

You do not have to become sarcastic or step upon the physicians' toes, simply get right up in meeting and tell what you are capable of.

Prove it by showing him samples of your work or by making a display and presenting him with some for use.

Go In To Win.

Use businesslike methods in creating this demand on the part of the physician the same as you would were you introducing a new line of fountain syringes, a new perfume or a new fountain drink.

There are few physicians who can long withstand your arguments for you have everything on your side to win.

You have most fertile ground to work upon, for the physician must

have better medicines than nostrums to work with and it simply resolves itself into the question "will the pharmacist make good in this important crisis?"

It is largely owing to this pressing need for better and more reliable medicines, that physicians generally are disposed to encourage get together meetings with pharmacists. Hence, if the pharmacists do not succeed in thoroughly convincing their medical friends of the absolute superiority of the official preparations over all others they have no one to blame but themselves.

The only way the pharmacist will or can block this favorable opportunity is by inaction, (that is, doing nothing) or by being unable to make first-class preparations.

Nothing else can stop this great forward movement of getting back to first principles in medicine.

Go into this matter, Mr. Pharmacist, with all the powers and resources at your command. You are in a winning fight, for you need never fear that your deeds will be unwelcome to the members of the medical profession.

They are looking to you for relief from an oppressive condition, and nothing but high-grade, pure and therapeutically active medicines will fill the breach. Will you make good?

CHAPTER LI.

As one of the effects of the N. A. R. D. propaganda movement, it is discovered that some of the so-called pharmaceutical manufacturing houses are even greater enemies of the retail druggist than was at first supposed.

It would do the entire profession of pharmacy, as represented by the retailer, a world of good, if it would forget **all other** forms of competition and devote its entire efforts, time, energy and resources to shaking off that most treacherous of all competition, as represented by numerous manufacturing concerns, whose methods are little removed from downright theft.

Up Against Old Hands.

The wide-awake pharmacist naturally realizes that he is up against

"old hands" who have vast amounts of money invested in their scheming, unscientific business methods and who, when blocked in one attempt, soon find other avenues through which to work their schemes.

A great number of the better class of physicians have already dropped the nostrum preparations like a hot potato, when they discovered the value of the U. S. P. and N. F. preparations, through the educational efforts of the N. A. R. D. Enough have done so to worry the manufacturing concerns indicated, consequently activities of a newer sort must be attempted, and the nurses and the dentists are now being called upon to assist these reprehensible schemers in distributing their goods and literature.

These two classes of professional workers, the nurses and the dentists, are now being flooded with samples of plasters, poultices, antiseptic washes, preservatives, hypophosphites, pain-killers, headache remedies, tasteless cod liver oils, etc.

Will They Succeed?

It is so easy to "tack on a fancy name to any preparation" and equally as easy for the laymen to "catch on" to it, that these firms are only renewing and redoubling their scheming tactics to prevent their business going to smash.

Will they succeed? It all depends upon how much longer the pharmacist will allow himself to be used as a door mat by these people or by any other people.

NOTES, the weekly journal of the N. A. R. D., has often published the names of firms whose sole ambition is to furnish physicians with the poorest and cheapest grade of elixirs, syrup, tablets, pills, etc.

Some of these firms have even succeeded in supplying druggists with their preparations, such a one being, for instance, the Jno. T. Milliken & Co., of St. Louis. This firm sends letters to physicians, of which the following is a sample:

The Milliken Firm's Letter.

St. Louis, Mo., Sept. 1, 1909.—Dear Doc-

tor:—We take pleasure in sending you for immediate acceptance a few special quotations for seasonable goods in our line, and would be much pleased to hear from you in the way of orders.

We give prompt attention to mail orders, and any favors we may receive at your hands will be highly appreciated.

If you are not already a customer, send us a trial order and we will convince you that it will be to your interest to continue buying your goods from us.

Yours truly,

JNO. T. MILLIKEN & CO.,

Per John Crouch,
Acting Sales Mgr.

As one druggist writes: "And to think that I and other druggists buy goods from Milliken."

They have been buying goods not only from a firm in direct competition with the druggist, but from one who is using its entire resources to make more dispensing doctors. One of the quotations is: "100, 4 gr. Sulphate Quinine tablets, chocolate coated, 29c."

These conditions will exist until such time as the N. A. R. D., with the aid of other powerful organizations, can place laws on the statute books prohibiting any but registered pharmacists distributing remedial agents for the cure and alleviation of sickness and disease, and also make the registered pharmacist responsible for the quality of the same.

Therefore, every pharmacist should leave nothing undone to assist the N. A. R. D. in obtaining information that may be of help in securing such legislation.

When we are ready for the final word, the proofs "to recognize the pharmacist as the sole qualified dispenser and seller of medicines" should be so conclusive that there will be no failure possible in placing such a law on our statute books. In the meantime, never let up on your detail work with the physician, showing him the difference between recognized standard preparations and the fraudulent nostrums, special makes and cheap pharmaceuticals of the manufacturer whose sole object is the hoodwinking of physicians for private gain.

CHAPTER LII.

The reader is earnestly requested to read advertising Chapter XXX in conjunction with this chapter. It gives some fundamental reasons, and along rational lines, as to what propaganda means to the druggist and how it can and must be accomplished.

It gives reasons in a broad sense as to the necessity for the movement and a very sensible reason for working in harmony with the N. A. R. D. to carry it to a logical conclusion.

The following is a rough draft of the eighth letter to physicians.

The Eighth Letter.

Dear Doctor:

In our efforts to bring to your attention reliable and active standard preparations, the three described in the enclosed booklet, we believe, are of sufficient importance to merit your most loyal support.

That this propaganda in behalf of good pharmacy and the official preparations is receiving most excellent encouragement was evidenced by the reports of hundreds of pharmacists present at our annual convention in Louisville a few weeks ago.

We trust that the capable druggists who fill your prescriptions have merited their claim to the title of registered pharmacists in properly dispensing your orders for official and other preparations.

Our one ambition is to prove to you that the qualified pharmacist is thoroughly able to prepare and dispense your prescriptions and qualified to assist you in your daily work of combating disease and sickness.

We thank you for the kind consideration granted our previous efforts in behalf of legitimate pharmacy and hope to merit your continued support.

Sincerely yours,

THOS. H. POTTS, Secretary.

P. S.—Should you have mislaid or lost the booklet, "Therapeutic Information," sent you last month, we will, upon request, gladly send you another.

The insert accompanying this letter contains the subject matter below, arranged in proper order on the eight pages. The three preparations for sampling in October are the Syrup of the Bromides, N. F.; the Compound Acetanilide Powder, U. S. P.; and the Compound Syrup of Canada Snake-root, N. F.

The Accompanying Insert.

Why Prescribe U. S. P. and N. F. Preparations.

A few useful items from authoritative

sources that may be accepted by the medical practitioner as reliable.

Why U. S. P. or N. F.?—A Few Reasons.

1.—Because the official preparations are of known strength, the exact formula appearing in the U. S. P. or N. F., the only legal standard text-books.

2.—Because the quality of these preparations, as made by the capable pharmacist, is an assurance of therapeutic activity.

3.—Because of their known composition, various combinations of them can be prescribed effectively, thus avoiding incompatibility.

4.—Because there are so many official preparations and new and non-official remedies, all of scientifically proven merit, as to offer an excellent choice for almost all known diseases.

5.—Because the nostrum is always of secret and generally unreliable and changeable composition.

6.—Because the nostrum is exorbitant in price and the same one very often is offered under different trade names.

7.—Because the nostrum, even if it were a good remedy, cannot contain better or other drugs than those of recognized merit.

8.—Because the nostrum, accompanied by reading matter intended to encourage self-medication, is advertised directly to the patient with physician's approval and indorsement.

9.—Because, in prescribing official and standard preparations, you are giving yourself, the pharmacist and your patient, a square deal, with greatest benefits to all.

Getting Together.

Should you be so fortunate as to receive an invitation from a pharmacists' organization to be present at a get-together meeting of physicians and pharmacists, we would urge you to make every effort to attend.

The physicians of this country are well and favorably known for being socially, as well as professionally, honorable men, and the pharmacists, being likewise rated, an attempt to cement these two professions into a perfect harmonious whole, that all existing evils might be eradicated, should naturally receive the earnest support of all right-minded members of both professions.

All such meetings in the past, whether physicians were the hosts or pharmacists, have been productive of great good.

It has resulted in bringing the evils in both professions into the limelight, and by concerted action on a give-and-take basis, the atmosphere has been cleared.

An ideal relationship and one not difficult to secure takes into consideration this important fact, namely, there should be no rivalry between the professions of medicine and pharmacy, except that of doing good deeds, one for the other and both for the public.

PULVIS ACETANILIDI COMPOSITUS, U. S. P.

Compound Acetanilide Powder.

Composition. Each average dose of this official preparation contains $\frac{3}{4}$ grain Caffeine, $1\frac{1}{2}$ grains Sodium Bicarbonate and about 5 grains of Acetanilide, all of these drugs being chemically pure.

Therapeutics. This powder is antipyretic and analgesic in its action. More useful in high fevers when the temperature is above 103° F. In adynamic diseases, this preparation, as well as all other coal-tar antipyretics, must be used with the utmost caution.

Dose. The average dose is 0.5 Gm. ($7\frac{1}{2}$ grains), and is best administered in the form of powder, capsule or cachet. Compressed Tablets of this powder are not always reliable.

General Remarks. A judicious use of this preparation is of great value in relieving certain forms of pain, notably headache, migraine and neuralgia, but it has no influence upon the pain of acute inflammation. Its composition may be varied to suit individual cases. For instance, the Acetanilide may be replaced by Antipyrin or Acetphenitidin; again, the Bicarbonate of Sodium may be replaced with Carbonate of Ammonium or Bromide of Sodium, etc.

COAL-TAR ANTIPYRETICS.

Nostrum Frauds.—Probably no other class of nostrums has been used oftener with fraudulent intent than the numerous pseudo-synthetic coal-tar antipyretics and analgesics.

Almost every one has turned to be a fraud and there is a tireless monotony in the composition of them, all more or less patterned after the U. S. P. formula given on the opposite page. No matter what the fancy name of the nostrum may indicate, physicians should refuse to believe any further statements made by the sordid manufacturers, in the interests of their preparations.

Producing a Habit.—A common trick of the nostrum maker, in addition to his slipshod methods of manufacture, is to fortify mixtures containing comparatively harmless ingredients by the addition of hidden poisons or powerful drugs.

To this danger is added the additional risk in patients learning the name of the remedy and continuing its use after the actual necessity for it has passed. Thus do we get our morphine, chloral and cocaine fiends.

Securing Results.—It would appear therefore that the only way to secure the best results in the treatment of such conditions as require remedies of this class, is in acquiring an intimate knowledge of these remedies and their thoughtful selection.

SYRUPUS BROMIDORUM, N. F.

Syrup of the Bromides.

Composition. Each fluidram (teaspoonful) of this Syrup contains 15 grains of pure mixed Bromides, as follows: Lithium Bromide, $\frac{1}{2}$ gr.; Calcium Bromide, $1\frac{1}{2}$ gr.; Ammonium Bromide, 3 gr.; Sodium Bromide and Potassium Bromide, of each 5 grains. It is flavored with Vanilla and Compound Syrup of Sarsaparilla and colored with Cudbear.

Therapeutics. This preparation has the full power represented by pure Bromides and is a valuable spinal cord depressant, anti-convulsant and is powerfully anaphrodisiac.

Dose. 4 Cc. (1 fluidram) well diluted and given after meals. Bromides should never be given in the form of compressed tablets.

General Remarks. In certain forms of epilepsy, it may be combined with Antipyrine and Fowler's Solution (Liquor Potassii Arsenitis, U. S. P.). Many practitioners have found it reliable in the varied nervous disturbances that attend the menopause. It is incompatible with acids or acid salts, and precipitates Morphine, Quinine and Strychnine from neutral solutions. The Syrup has a clear brownish red color, is palatable and very acceptable to the stomach, seldom causing irritation.

SYRUPUS ASARI COMPOSITUS, N. F.

Compound Syrup of Canada Snake-Root.

Elegance. This elegant preparation is one of the most valuable vehicles that the physician can use in rendering bad-tasting drugs palatable and acceptable to the stomach. It has a beautiful red color, pleasing to the eye and the sweetness and flavor to satisfy the palate.

Composition. Each fluidram of this syrup represents approximately 6% of Asarum (Canada Snake-Root) and 3% Wine of Ipecac. It is slightly alkaline, rendered so by Potassium Carbonate, and Cochineal gives it its rich red color. Alcohol content about 20%, and Sugar content 72%.

Uses. This vehicle is an acceptable alternate or substitute for other common vehicles, and will doubtless prove a pleasant change to the patient who of necessity must take medicine for a long period of time. Especially does it make a desirable adjuvant or vehicle to expectorant mixtures. It is also one of the best vehicles for iodides. It has a flavor peculiarly different from any other preparation.

Palatable Nostrums. With a little study and experimentation with this and other elegant vehicles, the physician can produce the most palatable combinations and thus do away with any apparent need of "palatable nostrums."

No Virtue in Secrecy.

There is no virtue in "Secrecy in Medi-

cine," and any physician will recognize the self-evident fact that all of the effects produced by a private combination of drugs can and must be produced equally as well by the use of the same drugs when designated by their proper titles. If a nostrum is labelled "Cardica" and contains Squills, Digitalis and Saltpeter, then "Cardica" has no greater remedial power than have the three drugs mentioned. And again, because a nostrum label states that certain ingredients are present in a mixture this is no guarantee that they are actually present.

CHAPTER LIII.

What can a pharmacist do to make the drugs and preparations of the U. S. P. and N. F. popular with physicians, as their importance warrants they should be?

While all active members in this movement have much to show in the way of direct benefits received, there is still one feature of the movement that does not receive the attention which its importance demands.

This feature is the organization factor, the co-operation between druggists necessary to carry on the work intelligently, so that any of the ground gained may never be lost.

For instance, you are a capable pharmacist and your work has been appreciated by the physician. You are very enthusiastic and things look rosy to you.

But it is not possible that those physicians whom you have been instrumental in interesting in this work can send all their prescriptions to your store,

Some will go to other pharmacists, and if these other pharmacists do not fill the prescriptions with as good medicines as you did, there is going to be trouble. One of two things is going to happen.

The Two Factors.

Either the physician will become discouraged and think there is not much reliance to be placed in official medicines, or he will bend all his energies and efforts to induce his patients to come to your store to have their prescriptions filled by you.

The first of these, the discouraging factor, is being worked overtime by the nostrum interests which are bend-

ing their entire energies towards picking every possible kind of a flaw in the official preparations.

That the nostrum people are losing ground daily is self-evident, and they will on that account, and most naturally, fight all the harder to prevent the total destruction of their lucrative and harmful business.

The second, the encouraging factor, is of course a very pleasant one for the capable pharmacist to contemplate, but it is sincerely to be hoped that on account of the nostrum activity, druggists will lose no time in getting together and making their organization a most compact one, whether city, county or state.

A Complete Union.

The most strenuous efforts should be made to get every pharmacist into your association, for only in "total union" is there the strength necessary to kill this monstrous nostrum evil, and to secure proper recognition for the pharmacist.

As illustrating the need for strenuous work along these lines, we are publishing in substance a letter sent by a loyal N. A. R. D. member, Mr. H. W. Hanson, of Woonsocket, R. I., to the druggists of his city, and to which only a limited number of satisfactory replies have been received by Mr. Hanson.

But any reply is an encouragement. It illustrates, however, that many pharmacists as yet do not realize their own power, nor whither they are rapidly drifting, nor yet the actual conditions that are fast surrounding them.

We can only say that organization and educational work must be done, personally, as long and as aggressively as is necessary to convert every pharmacist in a locality into a wide-awake, active booster.

The Appealing Letter.

"Gentlemen:—Ethical pharmacy and department store pharmacy are the two extremes existing in the drug business today. In some cities, in the west more than in the east, these two conditions are farther apart. By this I mean that the western druggists try, and do, to a greater extent, live up to the ethical part of pharmacy more than the druggists of the east.

Excuses.

"You may answer that competition has been so keen that physicians are gradually branching away from treating disease with medicine, thereby causing you with others to gradually branch away from ethical pharmacy to the department store on a small scale.

"I will admit that the western druggists have no such competition as the eastern druggists have to contend against, but is it not true that they hold together a great deal better than we do? Are they not more enthusiastic over ethical pharmacy than we are? At least, do they not show it?

"Let me pause a moment and answer your question. Why am I comparing western druggists with eastern druggists? If we have the opportunity to improve our conditions, should we not consider that opportunity?

Setting an Example.

"If our western brothers are setting an example that the other druggists throughout the middle west and east are following and are being benefited by so doing,—viz.: in price-protection, improvement of pharmacy, and U. S. P. and N. F. Propaganda work—would it not be beneficial, and no inconvenience, for us to do the same?

"It was not so very long ago that the western druggists compelled Sears, Roebuck & Co. to drop their mail-order business in pharmacy, and they are also successfully eliminating the 5c and 10c package goods.

"In Worcester, they have started to resume the old schedule, that of May 15, 1908, and everything bids fair for a better outlook to the drug business in that city.

"In Providence, when H. & L. commenced their price-cutting, all the other druggists combined and informed H. & L. that if they (H. & L.) did not conform with the regular schedule then in force, that they (the druggists) would cut under them every time, the result being that H. & L. soon agreed to conform to the schedule of May 15, '08.

"In Pawtucket, H. & L. commenced the same tactics, but were soon forced to use the old schedule. In all these cities the drug business is booming and the druggists are optimistic and contented.

In Woonsocket?

"The question before the druggists in this city is the same question that has come up, time and again, before the druggists of other cities, and I for one think that we should profit by their experience.

"There is no doubt in my mind that we all could continue with the present schedule on patent medicines, but that is not the question. Why should we as professional men continue to lower the standard of our profession?

"Is it possible for the druggists of this city to meet and discuss the present conditions, to have friendly talks upon subjects pertaining to pharmacy and science, to arrange to conform with the minimum schedule of May 15, '08, and to do effective propaganda work?"

There is no reason apparent at the present time why the great body of pharmacists throughout the country will not soon be linked together in one solid organization.

It is simply a question of how long it will take to remove the cobwebs from some and awaken them to the real danger that pharmacy is in, viz.: the clutches of the nostrum evil, and as long as this evil exists no square deal is possible for the pharmacist, the physician nor the public.

CHAPTER LIV.

Two further reasons on, "What can a pharmacist do to make the drugs and preparations of the U. S. P. and N. F. popular with physicians."

One of the most important factors in popularizing these preparations, as has so often been stated, is having them on hand, and having them absolutely perfect.

Must Be Reliable, or Failure Sure.

No lasting success or popularity can come from any work done in behalf of an official or unofficial preparation, if it is not therapeutically active. The physician must get satisfactory results from their use or he will not prescribe them. Pharmacists must remember this, as it is all important.

The nostrums are fast falling into disrepute on account of this negative factor, unreliability, hastened of course by active propaganda work in exposing them.

The physician must have dependable medicines and will not be satisfied with anything short of the best. He has been fooled so often with the nostrums that he is anxious about the reliability of the new (to him) official and standard preparations that are being brought to his attention through the efforts of the N. A. R. D. Therefore, it behooves the pharmacist to make these preparations perfect.

New Fields of Activity.

Another method that can be pursued to assist in popularizing the official preparations is by assisting medical students to become familiar with them.

If this part of the work is done intelligently and persistently, it will do one thing that can be done in no other way. It will shut off and shut out a source of supply from the nostrum houses, one that keeps their preparations on the move and prevents the nostrums from becoming extinct.

The young medical student has been a most prolific source of revenue for the nostrum interests, for these young men, as they themselves admit, are sampled by the nostrum houses for three and four years, being the length of time they attend medical college. And as their *materia medica* instruction, as far as medicines are concerned, has been a minus quantity in the past, also by their own admission, why would they not eagerly grasp at anything in the line of medicine offered them?

There is the fountain head of a large part of the nostrum prescriptions, and while no one would dare say or even intimate that some nostrum houses had contracted to furnish therapeutical instruction to students in the past, it would be to the manifest advantage of both the physician and the pharmacist, if the latter as a class would do something to acquaint the student with the standard medicines.

Students Should Receive Literature.

In those cities where there are medical colleges, the local association of retail druggists should insist upon all medical students being regularly furnished with some excellent literature on official preparations, and senior students should be sampled the same as the regular physicians.

This work has been done in several cities, notably Philadelphia and Chicago, and has been well received, students showing much interest and professors and instructors manifesting a sincere willingness that official medicines be given every possible oppor-

tunity to prove their merits. On this account local druggists associations should take heart and interest themselves in this work. The expense is but little, and the N. A. R. D. will furnish supplies and literature at a minimum of cost.

As one professor of therapeutics in a well-known medical school states, "This U. S. P. and N. F. propaganda work among my students is certainly grand, and by starting with the embryo physician, the seed for a thorough knowledge of *materia medica* is sown, against which the nostrum interests are powerless. It is only when the nostrum interests get in the first few suggestions that makes it so difficult for the young student to proceed the way he normally would."

Every medical student, with but few exceptions, will be a regular practicing physician some day, and every pharmacist will receive his reward for work done among the student body.

Individual Work.

Another method of great assistance to the one just mentioned takes into consideration the fact that almost every medical student in any college in the United States is known to some druggist. Every druggist can, therefore, by the expenditure of but a few cents, mail good U. S. P. and N. F. literature to all his friends who are students at college.

The student from one village or city who receives this literature from his druggist friend may locate in a different state upon graduation, and thus the druggist may imagine his labors have been for naught, but such is not the case. Another druggist may get the direct benefit of your work, but this work averages up nicely, and the new physician who locates in your neighborhood may have received his literature from a druggist 500 miles distant from you.

For instance, you are located in a small country town in Ohio, and two young men of your village are studying medicine in New York, with the intention of locating in Montana to practice upon graduation.

The Law of Averages.

You can, of course, see that no amount of correspondence with these young men can be of any financial benefit to you, but you should find out their addresses and mail them, regularly and every month, literature that exploits and recommends U. S. P. and N. F. preparations, or any other preparations that are standard and free from the nostrum taint.

However, if the druggist in the Montana town in which these two young physicians locate has done similar work with one or more of his friends who may locate in your Ohio town, your work will have the same effect as if your two friends had come back to their home town to practice.

The law of average is as true here as in everything else. New physicians are constantly locating in every city and village in the country, regardless of their place of nativity, so none of this work by the pharmacist is wasted.

This kind of propaganda work, while inexpensive, is among the most practical and effective that can be done.

CHAPTER LV.

The following item has been going the rounds of the pharmaceutical press rather conspicuously of late, sometimes as an editorial and sometimes as a reading notice from some nostrum house:

"Going into a drug store one day, I found the prescription clerk (a German, who believed in making up all of his preparations), busy rubbing up a two-pound batch of cataplasma of kaolini in a large mortar. The back room was filled with powdered clay dust, oils, glycerin, antiseptics, bottles and graduates; the pill tile and two large mortars were covered with the preparation; after rubbing the clay, glycerin, oils and antiseptics together for three hours, a poorly finished product was produced, far from being smooth, pasty and perfect, at a cost of four hours' labor, three hours' rubbing the mixture and one hour cleaning up, \$1.25, glycerin 39c, kaolin 10c, oil and antiseptics 10c; total \$1.75. Did it pay?

Cataplasma of kaolini, U. S. P., improved by the addition of iodine, menthol, eucalyptus and 5 per cent more glycerin, thoroughly mixed, ground and incorporated together

into a smooth, even and perfect paste, ready to use without the aid of heat, is Denver Mud. It is made in Denver, the home of Denver Mud. There is nothing better made and it is furnished to the druggists for less than they can make it."

Belittling the Druggist.

How any conscientious editor can allow space in his paper for such disparaging remarks on the pharmacist's ability, even if he is well paid for it, surpasses all belief. The makers of "Denver Mud" have since been enjoined from manufacturing their product, as it was an infringement upon another specialty.

While Cataplasma Kaolini, U. S. P., offers rather more difficulty in its manufacture than some other official preparations, it is by no means such a tedious and expensive task as the above item would seem to indicate.

Many pharmacists in the writer's personal experience have made a very satisfactory four pound lot in thirty minutes' time and at a total cost of 52 cents, being 13 cents per pound. Therefore, the statement made is entirely erroneous and simply another of the nostrum maker's way of getting into print.

The successful exploitation of proprietaries today requires just as much secrecy as it ever did, and the requirements of publicity are evaded either in giving a false formula or one that is meaningless, or else it is claimed that the method of manufacture is unique and a most remarkable secret, possessed only by the manufacturer.

We believe it is high time for druggists to look somewhat deeper into the origin of some of the evils of the drug business. When the so-called "champion of the retail druggist" drug journals print such stuff, when they do everything they dare do to throw cold water on the U. S. P. and N. F. propaganda movement, and when even prominent educators call the N. F. a mistake, it seems to be high time that the retailer himself should inquire into the reason for these overt acts.

Enemies to Pharmacy.

These people and these journals are violating the trust reposed in them by

the retail druggist—they are anarchists committing high treason against an honorable profession and should be forcibly suppressed, squashed with the steam roller, to prevent their doing further mischief.

The duty of the retail pharmacist as a qualified professional worker lies in the direction of making his own medicinal preparations and from high-grade drugs, and any effort by any man or set of men in an opposite direction, is treachery, pure and simple, and should so be considered by the registered pharmacist.

It was the nostrum interests that were primarily responsible for the fact that the druggist was considered a robber in the eyes of the public and who thus turned attention away from their fraudulent and thieving practices.

The present day druggist, however, is rapidly turning the tables on the nostrum fellow and more and more is the public regarding the capable pharmacist as one of the most important links in the chain of present social conditions, standing in the same class with the physician, the lawyer, the professor and the banker, and second to none.

It was the nostrum interests that were originally responsible for the druggist being called a substitutor, but today, thanks to such organizations as the N. A. R. D., A. Ph. A. and others, these "interests" are very careful to have legal proofs of one case of substitution before they shout.

The druggists are thoroughly aroused at the insulting manner in which they as a class have been called substitutors and woe be it to any "interests" who keep it up. Druggists today are standing up for their rights; they certainly are as honorable a body of professional workers as exist anywhere in the world and furthermore their just demands are meeting with recognition.

Et tu, Brutus.

Now, by means of influential but false friends and journals, every attempt at progress and independence is

belittled, and for nothing but "filthy lucre."

Shall we blame the nostrums interests for this also, or shall we ascribe it to such men who are morally and mentally weak, not able to put up an honorable fight for official medicines and who see financial gain in belittling the pharmacist?

The answer is, blame it on to both. Therefore, we repeat, the pharmacist should use as much care and caution in choosing his drug journal as he would in choosing his bride. And when any remarks are made by no matter how influential a personage, derogatory to the retail pharmacist or his profession, he should carefully study and analyze such remarks and trace them to their source and then act accordingly.

The art of pharmacy will live forever. The pharmacist, as the legally authorized agent of the state to practice this art, has only to work along progressive lines and to insist upon his recognition as a professional worker, that he may soon become what he is intended to be, the sole legal purveyor of medicines for the sick.

CHAPTER LVI.

Most encouraging reports continue to come from pharmacists and physicians alike, from all parts of the country, on the benefits derived from active propaganda work.

The work is so simple and withal is in such perfect harmony with the intelligent practice of the art of pharmacy, that this is not at all to be wondered at.

At the present rate it will not be long before every capable pharmacist will of necessity become actively engaged in this work, its benefits being so obviously apparent for the pharmacist's financial and professional advancement.

The ninth letter, a rough draft of which appears below, was mailed from National headquarters, November 18, 1909.

The Ninth Letter.

Dear Doctor: The importance and value of the three official preparations mentioned in the enclosed booklet are firmly established.

They are deserving of your careful consideration, because they meet the requirements of the trained physician in the treatment of disease. Their efficiency is beyond question.

Our Association is receiving much encouragement from practicing physicians and teachers of *materia medica* and therapeutics in medical colleges. They regard our efforts in setting forth the inherent good qualities of the preparation of the U. S. P. and N. F. as highly beneficial, thereby supplementing the reform work of the medical societies.

We feel, therefore, that the physician also, in some degree, is being benefited by the monthly literature we are issuing, as our aim is to assist in convincing him that the nostrum is not only a fraud, but is unscientific and unnecessary as well. This the A. M. A. has often successfully demonstrated.

As nostrums have been proven to be unworthy of the confidence of physicians, members of the medical profession are finding it wise and proper to discourage the use of this class of preparations.

With kind regards, I am, most sincerely yours,

THOS. H. POTTS,

Secretary.

The eight page insert that accompanied this letter is entitled "Some Meritorious Therapeutic Agents" and is substantially as follows:

Secrecy vs. Science.

The great demand for the N. A. R. D.'s monthly pamphlets and various booklets on U. S. P. and N. F. preparations, by members of the medical profession, undoubtedly shows a healthy spirit of inquiry and an honest attempt to entirely break away from the use of nostrums and to confine themselves to open formulas and official preparations.

The practice of medicine can rid itself of the over-confidence in nostrums by a proper appreciation of the great possibilities lying dormant in the science of pharmacology, as practically illustrated by the pharmacological pioneers, the U. S. P. and the N. F.

The nostrum maker makes deliberate attempts to misrepresent the value of the thoroughly established and efficient official remedies. He does not attack the products of a rival nostrum maker, probably because of a mutual agreement between them, as that would tend to "queer the entire game."

He is not interested in the standard preparations of the U. S. P. or N. F., as they

are not profitable to him; hence he belittles these with impunity, and often a too willing ear is lent to the claims of the smooth nostrum maker and the old, time-tried official preparations are ignored entirely.

The Pharmacist's Show Windows.

Medical practitioners, as a rule, are much opposed to the display of a certain class of nostrums, the so-called "patent medicines," in the pharmacist's show windows.

They have a right to feel offended at this lack of foresight on the part of such pharmacists as practice such semi-endorsement of the nostrum, fully as much as the equally pernicious habit of endorsing them over their signatures in newspaper advertisements.

To the credit of pharmacists, be it said, however, that this practice is fast disappearing, as they realize the inconsistency of such a course, and are employing themselves much more actively in the intelligent practice of the art of pharmacy.

While the sale of this class of preparations will probably never die out, pharmacists as a class realize that the prescribing of remedies for human ailments is safest in the hands of the physician, and the N. A. R. D. is doing everything in its power with its members to bring such a condition about.

ACETPHENETIDINUM, U. S. P. Phenacetin.

Properties.—Acetphenetidin occurs in white, glistening, crystalline scales or as a fine, crystalline powder, odorless, tasteless and practically insoluble in water. It is a phenol derivative, the product of the acetylation of para-amidophenetol.

Therapeutics.—Antipyretic and analgesic. It exerts much the same influence as do Acetanilide and Antipyrin, but is much less toxic than either of these drugs, and its effect is more lasting. It is employed with advantage in the neuralgic and nerve pains arising from chronic diseases of the nervous system.

Dose, Etc.—Average dose is 0.5 Gm. (7½ grains), preferably prescribed in the form of powder, capsule or cachet. Compressed tablets or pills of Acetphenetidin are not always reliable. It is incompatible with Salicylic Acid, Chloral and oxidizing agents.

General Remarks.—Acetphenetidin is the most satisfactory of the coal tar antipyretics and the individual practitioner will find it decidedly preferable to study the action of this drug and also Acetanilide and Antipyrine, rather than experiment with the large number of nostrums of this class.

Methods of Prescribing.

As illustrating some of the effective combinations of this drug used by successful practitioners in various ailments, the following formulas are appended:

R—Acetphenetidini gr. xxx
 Caffeinae gr. xv
 Sodii Bromidi gr. lxxx
 Elix. Adjuvantis, ad. f ℥ii
 M. Sig. Shake well. ℥ii every 2 or 3 hours.

R—Acetphenetidini ℥i
 Caffeinae Citratae gr. xx
 M. ft. chart, No. XII.
 Sig. One powder every 2 or 3 hours.

R—Acetphenetidini gr. xxv
 Caffeinae Citratae gr. v
 Sodii Bicarbonatis gr. lxxx
 Acidi Tartarici gr. lxx
 M. ft. Chart, No. V.
 Sig. One powder in half a glass of water every 2 or 3 hours.

R—Acetphenetidini gr. xxv
 Sodii Bicarbonatis gr. xx
 Ammonii Carbonatis gr. x
 M. ft. pulvis, No. X.
 Sig. One every 1 to 3 hours.

R—Acetphenetidini gr. xxx
 Sodii Bicarbonatis gr. xx
 Magnesii Oxidi ponderosi gr. xx
 Caffeinae gr. x
 Cinnamomi pulv. gr. v

SYRUPUS SENNAE COMPOSITUS, N. F.

Composition.—Each average dose of this excellent preparation represents 16 grains of deodorized Senna and 4 grains each of Rhubarb and Frangula (Buckthorn). It contains about 17% of Alcohol and is flavored with the Oil of Wintergreen.

Therapeutics.—The Compound Syrup of Senna is purgative in its action, being considered one of our best official laxatives and is free from griping tendency. Simple bitters, as Gentian and Colombo, increase its activity.

Dose.—The average dose is 8 Cc. (2 fluidrams), preferably administered upon retiring, full doses being advisable.

Remarks.—Fashions in medication may change, but the fundamental principles underlying the rational use of medicine never change. Senna in some form or other, has proven an effective laxative for centuries, and the above therapeutically active preparation should find favor with the physician in a large number of cases requiring this class of medication.

LIQUOR FERRI ET AMMONII ACETATIS, U. S. P. Basham's Mixture.

Composition.—This well and favorably known preparation contains 4% of the Tincture of Ferric Chloride, 6% of Dilute Acetic Acid, 50% of Solution of Ammonium Acetate, 12% Aromatic Elixir, 12% Glycerin and 16% Water. This gives about 10 grains of the double salt of Iron and Ammonium Acetate to each dose.

Therapeutics.—Basham's Mixture is a hematinic tonic and refrigerant and an efficient and valuable chalybeate diuretic in

chronic nephritis. It is considered the best form of iron to use in combating the anaemia of Bright's Disease.

Dose.—The average dose is 16 Cc. (4 fluidrams). Small doses being preferable in nephritis. It is best administered with a liberal draught of water, through a glass tube.

General Remarks.—Inorganic forms of iron, of which this preparation is a type, are assimilable, in spite of the claims of certain nostrum makers to the contrary. Basham's Mixture is of a deep-red color, of a pleasant, acidulous taste and while a stable solution, is freshly prepared as wanted on prescriptions.

QUALITY.

Quality counts in medicine as it does nowhere else. It stimulates the pharmacist in manufacturing, it pleases the physician because he gets results and it satisfies the patient for it helps him—a square deal all around. Every capable pharmacist can make "quality" preparations.

CHAPTER LVII.

When a physician is busy, there is always a reason for it. There is something in his method of handling patients that appeals to them, most important of which is the success he has in making sick people well.

A busy physician has little or no time to dispense his own medicine, therefore the pharmacist has two openings here to make himself useful; first, it will be to his interest to make as many busy physicians as possible, and second, he should make most strenuous efforts to fill as many of the busy physician's prescriptions as possible.

Fortunately, and in the great majority of cases, the accomplishment of the first object brings about the fulfillment of the second.

Ethics and Quality.

Now what can the pharmacist do to make a busy physician? Many things, but however many there are, when they are all considered collectively, (mixed as it were), boiled down, filtered and allowed to crystallize, the sum total will be two crystals, ethics and quality.

The ethics in the art of pharmacy are simply the honorable actions of a capable pharmacist in his relation with the (in this case) members of the medical profession. It presupposes that

you have qualifications and professional standing and are willing to deal "on the square" with the medical man.

But quality is the thing—it is that important factor that causes the physician to get results, to advertise his qualifications as a skilled medical man in the community; in fact, quality in the pharmacist's preparations makes for "a busy physician." And a busy physician makes a busy pharmacist.

Quality in a preparation is the one essential factor that will make this great national propaganda movement of the N. A. R. D. a success, **and nothing but quality will do it, nor can do it.**

And what are we **pharmacists** for, anyhow? Are we not pharmacists primarily for the purpose of furnishing medicines for the sick and diseased? We may do many other things to make a living and lay by something for a rainy day, and enjoy doing them, but our very first duty and our most important one, is the ability to make "quality" preparations. No one can dispute this fact.

Furthermore, no physician can accomplish anything worth while with drugs if these drugs are not the very best possible to be had. He may get meagre or indifferent results with carelessly made preparations or impure drugs and chemicals, but such results do not tend to make "a busy physician."

Such results will cause the physician to refrain from using these drugs at all and either make of him a "therapeutic nihilist," or he will try every Tom, Dick and Harry's nostrum.

Very naturally, he is not going to quit practicing his profession if he can help it, and therefore he must find some means of alleviating suffering and curing disease if he is to stay in practice.

Drugs Cure All Diseases.

It has been proven by clinical experiment that the use of the proper drug (if pure) when used in the right place, will, in a large percentage of cases cure almost every known form of disease. Hence we must conclude that if

the pharmacist will simply do his duty in supplying "quality" drugs and preparations to the physician, there is likely to be a decline in the popularity of drugless systems of healing, as *materia medica* is generally given first chance at a case in a great majority of instances.

Of course, this presupposes that the physician is thoroughly skilled and is able to prescribe properly from a correct diagnosis, but that is not the pharmacist's concern.

It is, however, a fact that when the physician does do his part of the work correctly (diagnosing and prescribing) and the pharmacist then furnishes an inferior preparation, all the skill and knowledge of the medical man is for naught, and that is the pharmacist's concern.

Now to go a little farther into the practical part of this matter, it is almost impossible for a pharmacist to determine what the physician's experience has been with reference to using "quality" drugs—whether he has always been fortunate in getting the best, or whether he has almost reached the stage of "drug abandonment" (therapeutic nihilism) on account of his patients being furnished with inferior preparations,—unless he keeps in the closest touch with his physician patrons?

Advertising Quality.

In either case, and especially in the latter, it becomes the pharmacist's plain duty to inform the physician that in your pharmacy none but "quality" preparations are dispensed, and an effective way of doing this is by means of a letter, of which the following, used by G. I. Schreiber, of Newark, N. J., will serve as an illustration:

Dear Doctor:—

I am pleased to call your attention to the fact that I have had the pleasure, to-day, of filling prescription number..... prescribed by you for

I wish to call your attention to the fact that any prescriptions filled by me are sure to give the therapeutic results desired, as only pure drugs and chemicals from reputable houses are considered in my purchases.

I also wish to emphasize the fact that only tinctures made from the drug are dis-

pensed in the prescriptions compounded in my place.

I would be pleased to have you call on me when in the neighborhood. Thanking you for your kind attention, I am,

Respectfully,

G. I. SCHREIBER.

P. S. I have an interesting booklet for the progressive doctor who is in sympathy with the propaganda, against the non-ethical proprietary. If you are interested, please drop me a line, as I send it on request only.

Preach Quality Always and Deliver It.

The wording in such a letter can be modified to suit individual circumstances and can be used as a weekly or monthly communication. Too much emphasis, however, cannot be attached to the quality of your preparations in such a letter.

Every possible precaution should be taken to assure yourself that the quality is actually present and then lose no opportunity to convince the physician of that fact.

Remember always that the pharmacist's first duty to the physician and to the public is in furnishing the "very best only" in medicinal preparations. Let quality be your foundation and all your other activities be supplementary thereto.

CHAPTER LVIII.

Since June 30, 1906, there has been on the federal statute books the following section of the Pure Food and Drugs Act:

"**Sec. 7.** That for the purposes of this Act an article shall be deemed to be adulterated: In the case of drugs, first, if when a drug is sold under or by a name recognized in the United States Pharmacopoeia or National Formulary, it differs from the standard of strength, quality, or purity, as determined by the test laid down in the United States Pharmacopoeia or National Formulary official at the time of investigation: Provided, That no drug defined in the United States Pharmacopoeia or National Formulary shall be deemed adulterated under this provision if the standard of strength, quality, or purity be plainly stated upon

the bottle, box or other container thereof although the standard may differ from that determined by the test laid down in the United States Pharmacopoeia or National Formulary."

Section Is Indefinite.

This section is a travesty on justice and might just as well have been left out of the law and the simple statement made in its place "that no U. S. P. or N. F. drug is adulterated if a plain statement regarding strength, quality or purity is plainly stated on the container, no matter what the composition."

There is only one way to look at this broad question and that is the "quality" way. Every man with common sense, be he a pharmacist, physician, layman, professor, or in fact any consumer of medicine, realizes the fact that as far as his own personal self is concerned, he wants medicine of the best possible quality when it is needed at all.

Therefore, the sooner all the words following and including the word "Provided" be stricken from the above section, the better for the American public.

Meaning of the Proviso.

What do the words of the second half of this section mean? Simply this, that any cheap drug or preparation, no matter how weak or inferior, can be placed on the market by any firm, individual or corporation, and when it is properly labeled it will pass the watchful eyes of the law.

We have no desire to disparage in the slightest, any part of this really good law, but the pharmacists of the United States have a just cause for complaint when exposed to the degrading competition which it produces and which this law is supposed to correct.

Human nature is weak and the dispensing physician is no exception to the rule. He buys where he can buy cheapest, and not being as familiar with drugs and preparations as he ought to be, is easily led to purchase his supplies from certain and sundry

so-called pharmaceutical manufacturing houses and physicians' supply houses.

Supplies Generally Inferior.

And experience has proven that these houses **do not furnish** medicinal preparations of the highest degree of excellence, unless specifically so stated and insisted upon, which evidently is not very often the case, if the stocks in the average dispensing physicians' office are witnessed.

We claim, as is but natural, that a physician or any other man can do as he pleases, but we also claim that neither the federal government nor any state government has the right to hold a pharmacist strictly to account for the quality of the medicines he dispenses while entirely ignoring the physician who dispenses.

Such legislation is class legislation, and no state of this United States has a right to pass laws that favor any one class of individuals or grant them special privileges.

The laws of a state, so far as health and disease are concerned, should protect every inhabitant of that state alike, whether this inhabitant procures his medicine from a pharmacist or from a physician. There is not an honest dispensing physician in any state who would care to say otherwise.

Intent of National Law for Good.

We may be excused for making the above criticism of the national law and are willing to "take it back," as the intention of the law is for good. It **intends** that the people of the United States shall have pure medicines and holds the manufacturer, the distributor and the druggist to a rigid accountability, but only so far as an interstate law can do this.

But the various states give physicians the right, under their laws, to supply such medicine to their patients as may be deemed proper by them, the provisions being generally worded as follows: "Nothing in this act shall apply to the practice of a practitioner of medicine for the dispensing or retail-

ing of drugs, medicines or poisons and shall not prevent such from supplying their patients with such articles as they may deem proper," etc.

It makes no difference what kind of medicine the physician may give, the law has nothing to say about it.

This Is Not Justice.

This is not justice to the pharmacist, to the public, nor yet to the prescribing physician, and no stretch of the imagination can make such a law even appear just, much less **be** just.

It may or may not be wise to take from the dispensing physician his so-called but still unjust right, the "dispensing of medicine," but he should at any rate be held to just as strict an account as regards the character and quality of the medicines he dispenses as is the registered pharmacist for the character and quality of what he dispenses. That would be a "square deal."

A Question for the Dispensing Physician.

We should much like to have this question answered by any dispensing physician: Why should the law hold me exempt from giving my patients an inferior medicine when, if I write a prescription for it, the pharmacist who fills said prescription is compelled to give a standard preparation or suffer the consequences of the law? (providing of course that the specified drug or preparation is an official one).

We hold that no pharmacist is doing his whole duty to his profession, or to his countrymen, until he has succeeded in bringing the dispensing physician (or any other person who retails medicine) under the regulation of the same law which aims to regulate himself, in so far as the dispensing or retailing of medicines is concerned.

Work Ahead for the Pharmacist.

There is work ahead for local and state associations. These should, through their legislative committees, begin work at once that will bring the dispensing physician under the same regulations as those that govern the pharmacist. It may take much hard

labor through several sessions of a state legislature to pass such a law, but passed it must be, and upon the intensity and vigor displayed by the pharmacists in this work will depend the length of time that will elapse before such a law will be a fact.

Every right-minded physician will welcome such a law, and even the dispensing physician will discover its justness and usefulness soon after its passage.

And it is worth while, is it not, to have such a law? No amount of labor or expenditure of money is too great to place a law of this character upon the statute books of every state.

CHAPTER LIX.

In a recent letter the writer asks for information regarding certain features of the national propaganda work. The letter would lead one to imagine that there are many druggists in the same position as is this Indiana druggist and we will, therefore, endeavor to answer it to the best of our ability. The letter in substance is as follows:

Why Propaganda?

"I see by your weekly paper, NOTES, for which I have just recently subscribed, that you attack the so-called 'prescription-patent-medicine,' as Pineoleum, Kargon, Virœin Oil of Pine, etc. Why do you do this when they pay me as much profit as other patent medicines?

"I would also like to know why you fight the so-called nostrums and try to keep doctors from prescribing them, when I have over 200 in my store that cost me over \$150."

To answer these questions we will say that NOTES is doing these things because it believes as does every fair minded man who has given the subject careful study, that there is neither room nor need for secrecy in medicine. Answering the first question:

It is true that as much profit is made on one kind of patent (correctly termed proprietary) medicine as on another, when sold at full prices, but

it seems that if druggists will think a little, there is another side to this question than that of direct profits.

Other Things Besides Profits.

If these things are allowed to multiply unhampered, how long would it be before these would-be therapeutic educators would have every pharmacist and physician discredited in the eyes of the public.

It is not so much, however, because the prescription preparations are nostrums only that they are discouraged in NOTES, but the manner of their exploitation is so contemptible, vicious and dishonest that we are forced as a matter of conscience to raise our voice in protest.

A recent statement in this drug journal was, "the public is led to believe that such a prescription or formula represents valuable or scientific information given out by the editor of the paper in which the formula appears, and that the ingredients are common drugs to be had in any drug store, the same as Glycerin, Sulphur, etc."

It is this deception which the public cannot fathom that makes these preparations so dangerous, most of them being the rankest sort of frauds; and while some may do the patient no damage, their use often prevents him from seeking competent medical advice.

The Itchy Palm.

The newspapers which publish these formulas, while they are supposedly "public educators," are nothing more than parties to the fraud, and it is the "almighty dollar" of the fake proprietary medicine man that greases the presses of such yellow sheets. It certainly is not the much vaunted "educational influence of the daily press."

For this reason it is so difficult to secure legislation which will "put the lid" on these fraudulent nostrums and on the fraudulent claims made for them. Few newspapers would support such legislative measures, for they fancy that the legitimate proprietary industry will resent such legislation

and their proprietary medicine income is an important part of their advertising receipts.

The fake nostrum maker knows his power in this particular and he also knows that nothing short of loud, bold, blatant and deceptive advertising will sell his wares, hence he greases well the palm of the newspaper hand.

We trust that with these few remarks our correspondent will understand the position of NOTES in this matter, and that he and all druggists will become valiant champions of the N. A. R. D. and its weekly journal of progress and reform, and do what lies in their power to teach the public to discriminate properly.

Second Question Answers Itself.

As regards the second question, the question itself ought to be sufficient answer as to why the fight is made on the nostrums (meaning* evidently the so-called ethical nostrums), which physicians prescribe and which in a majority of cases, are as fakey as the fake preparations advertised to the laity and not near so ethical as the household remedies put up by the better class of proprietary manufacturers.

Just think, \$150 invested in nostrums, each bottle containing 4, 8 or 16 ounces of dead stock, when the same amount of money used in the manufacture of U. S. P. and N. F. preparations, would fill more than 300 quart bottles of these standard remedies.

The N. A. R. D. is fighting the nostrum, because the nostrum by one means or another has not only made a great part of the drug business unprofitable, but more than anything else has caused the breach between the professions of medicine and pharmacy.

To realize fully that this is the truth, we have only to consider present conditions in those places where the pharmacists are actively engaging in propaganda work—there the business is again becoming profitable and the breach between the two professions is gradually narrowing.

An Instance Cited.

For the benefit of this Indiana phar-

macist, and possibly hundreds, yes thousands of others, we will cite just one instance of nostrum exploitation, although we could cite hundreds: After reading it, our correspondent will possibly understand fully why the fight against the nostrum, even those made by some "reputable" manufacturers is waged so fiercely and so uncompromisingly by the N. A. R. D. "Saliodin has been marketed and on the trade package appears the following "formula": Each twenty grains of Saliodin contain approximately,

Salicylic Acid (Aceto-Salicylate)...	gr. xv
Iodine (Iodate), equivalent to Pot. Iodide	gr. xv
Acetic Acid (Acetate) equivalent to Pot. Acetate	gr. v
Aconite, equivalent to Tr. Aconite root	gtt. iv
Bryonia, equivalent to Tr. Bryonia.	gtt. v
Colchicum, equivalent to Vin. Colch. rad.	gtt. xv
Capsicum, equivalent to Tr. Capsicum	gtt. ii
Oil Gaultheria	minims iii

"A vague and indefinite formula, surely, and the following analysis showed it to be also incorrect and false, its composition being calculated to be approximately equivalent to a mixture of:

Sodium Salicylate	57.54
Potassium Iodide	1.18
Potassium Acetate	30.00
Matter volatile at 130° (Oil Anise, Oil Gaultheria, moisture, etc.)....	8.10
Undetermined (extractive?)	3.18
	100.00

"One manner of exploiting this 'ethical proprietary' is as follows:

How It Is Worked.

"A physician writes a pseudo-scientific article for a certain kind of medical journal, in which the nostrum is highly recommended, and this article is then used as a reprint to exploit the stuff to other physicians. In this case, as in so many others, the physician is the president of the nostrum company, used his M. D. degree as a commercial asset and thus others were led to believe that the testimonial was a spontaneous tribute from a practicing physician." (Extracts from an article on Saliodin, substantially as it appeared in the journal of the A. M. A., Oct. 26, 1907.)

This one instance is no better nor any worse than hundreds of others.

The commonest kinds of common drugs are clothed with peculiar, vague and "scientific sounding" names, thus surrounding the product with an "ethical" atmosphere that is sure to catch the physician who is not alive to the situation. Moreover, the fake testimonials, coupled with the fact that many pharmacists have not sought the physicians' patronage with standard preparations, have made a combination that few physicians could resist.

And all things considered, can the physician be blamed?

CHAPTER LX.

The three official preparations with which to sample the physicians in December are seasonable and most important.

Two important factors in propaganda work are manifested in the exploitation of these preparations, namely, pharmacists will have no difficulty in making presentable and active preparations and again, these three will, in the physicians' hands, do much in replacing hundreds of nostrums that are at present prescribed and which somewhat resemble the official preparations in action.

Therefore pharmacists should use every means possible to bring these important preparations to the attention of the physician.

The Tenth Letter.

Dear Doctor:

In the accompanying pamphlet you will find a brief description of three very important official preparations.

We are of the firm belief that a thorough acquaintance with them will convince you of their superior merit and that they are entitled to much more consideration at the hands of medical practitioners generally than has heretofore been granted them.

Why?—because these preparations represent research, they are perfect products that are at all times uniform in composition and the authority responsible for their admission into our legal standards, considered nothing but merit, both pharmaceutical and therapeutical, in placing the seal of "usefulness" upon them.

We trust, therefore, that your acquaintance with these three preparations may be extended and that you will derive much satisfaction from their use and that they will also, in a measure at least, prove more satisfactory than any nostrum with which you may have acquaintance.

With kind regards, I am,

Sincerely yours,

THOS. H. POTTS, Secretary.

The pamphlet accompanying this letter contains the following matter, neatly arranged in the form of an eight-page booklet:

The Eight-Page Booklet.

The booklet is entitled "Progress in Pharmaceutic Art."

Two Important Movements.—Two great factors in the advance of things medical and pharmaceutical and second only in importance to the propaganda in favor of official medicines, are the decline in the so-called "counter prescribing" and the "refilling of prescriptions."

This may be a matter of news to some physicians, but it is true nevertheless, and doubtless will prove a source of gratification to the members of the medical profession and emphasizes the fact that co-operation between members of the professions of medicine and pharmacy is productive of more good than laws. In the decline of the so-called "Counter Prescribing," probably no force has been more active than the methods of the National Association of Retail Druggists, and while the present status of this subject is far from satisfactory, the progress made by this association through its members in behalf of giving the physician a square deal, is certainly noteworthy and deserving of the medical man's support.

In regard to the "Refilling of Prescriptions," the progress made has been in direct ratio as the pharmacist has received the co-operation of the physician. This co-operation is essential, as it seems to be clearly the province of the physician to state what medicine his patient shall have and how long he shall take it—and it appears that the more definite this statement is made to the patient, just in that proportion will the refilling of prescriptions cease.

Freshly Made Preparations.

A capable pharmacist is very jealous of his good name, the same as every capable physician. He endeavors, to the best of his knowledge, to fill all prescriptions with reliable, accurate and active preparations, and as a rule is successful in doing so.

There are, however, occasions when he cannot do this, as, for instance, when other makers' preparations are ordered and for whose reliability and activity he cannot vouch, nor be held responsible.

This is very noticeable in the case of ready-made pills, tablets, capsules, etc., the use of which has been the occasion of numerous and aggravating disappointments to the physician.

The reason for this is that the coatings on the pills, and capsules also, have become so hard as to render them insoluble in the fluids of the stomach and intestines. Tablets are often compressed into stone-like bodies that effectually resist disintegration.

For these reasons, physicians will further their own interests by prescribing freshly made pills whenever possible and ordering them enclosed in gelatin capsules, if desired coated. Mixtures in powder form, as well as oils, can also be readily encapsuled, and thus the medical man is assured of prompt and reliable action from his medications.

Hexamethylenamina, U. S. P.

Characteristics.—Hexamethylenamine is a condensation product, obtained by the action of Ammonia upon Formaldehyde. It occurs in colorless, lustrous crystals, is odorless, of alkaline reaction, very soluble in water and has a sweetish taste.

Therapeutics.—A urinary and intestinal antiseptic and germicide. It is the most effective internal remedy in ridding urine of bacteria and has a remarkable power in arresting ammoniacal decomposition of that secretion.

Dosage.—Hexamethylenamine is given in doses of from 3 to 10 grains, the average dose being 4 grains. It may be given dissolved in water or other aromatic vehicles or in capsule form, followed by a draught of water.

Remarks.—This drug is deserving of careful study by the individual practitioner, as its use in proper cases is very prompt and exact.

A thorough knowledge of its usefulness will tend to relieve the physician from the worry caused by using the numerous and unsatisfactory nostrums purporting to be "cure-alls" for all kidney and bladder diseases.

The Urinary Antiseptic Nostrums.

There are numerous nostrum preparations on the market, more or less similar to Hexamethylenamine, but each having a different fancy trade name.

None are equal to Hexamethylenamine. This drug liberates Formaldehyde in the course of its excretion by the kidney, and this Formaldehyde forms some soluble combinations with uric acid. When this fact became known, it was the signal for the makers of numerous nostrums of the

above class, and representing various and variable combinations, to loudly vaunt their claims of curing gravel, calculus, gout and similar conditions with their preparations. The results of these claims, when the preparations were tried out by the physician, were similar to the general run of the use of nostrums, namely, highly disappointing.

Physicians desiring a compound preparation of this valuable drug will probably find satisfaction from the use of the following:

Hexamethylenaminae	℥ii
Lithii Citratis	℥i
Fluidextracti Sabali	℥iiv
Tincturae Cinnamomi	℥iv
Syrupus Aurantii, q. s. ad.....	℥iiv

Elixir Picis Compositus, N. F.

Therapeutics.—The Compound Elixir of Tar is a most valuable member of the class of official preparations having stimulant expectorant properties. The ingredients of this preparation have proven to be a peculiarly advantageous combination with many physicians.

Dose.—The dose of this Elixir is from 4 to 8 Cc. (1 to 2 fluidrams).

Composition.—Each fluidram (4 Cc.) of this Elixir contains 12 minims each of the Syrups of Wild Cherry and Tolu, 33 minims of Wine of Tar and 1-50 grain of Morphine Sulphate.

Its Alcohol content is about 13 per cent.

Remarks.—This Elixir has a very pleasant taste and is of a light amber color. In view of the near approach of the season for coughs and colds, we would again appeal to physicians to give preference to official preparations for the cure or relief of these ailments and not place too much value on the claims of the nostrum maker, whose remedy is generally claimed to "cure or relieve all coughs and colds."

Syrupus Rhei et Potassii Compositus, N. F.

Therapeutics.—Neutralizing Cordial, a common name applied to this official preparation, has marked powers as an antacid and carminative stomachic. As its formula will indicate, its application has a wide range of usefulness in various stomach and intestinal ailments.

Dose.—The average dose of this syrup is 4 Cc. (1 fluidram).

Composition.—Each dose represents approximately $\frac{1}{2}$ grain of Golden Seal, $\frac{1}{2}$ minim of Spirit of Peppermint, 1 grain each of Rhubarb, Potassium Carbonate and Cinnamon, and 13 grains of Sugar. The Alcohol content is 40 per cent.

Remarks.—This palatable preparation is deserving of great popularity. Many practitioners use it in combination with Pancreatin, some with Nux Vomica and Bromides and various other combinations are useful.

The nostrums having this preparation as a base are legion and offer no advantage

to the intelligent and discriminating physician.

Three Important Points.—For the physician to protect himself and his prescriptions, three important factors must be recognized:

First, prescribe by the official title, thus checking self-medication.

Second, mark prescriptions "do not repeat," tell your patients why and thus preserve a great share of your "stock in trade."

Third, prescribe only remedies of recognized merit and authoritative standing.

CHAPTER LXI.

A common phrase in almost daily use that has been handed down from generation to generation is "Two wrongs do not make a right."

Many pharmacists say if the doctors would give up dispensing, they would stop counter-prescribing. Both actions are admittedly wrong in a professional sense, as well as in practical usage. As such these two wrongs cannot make things right, and they do not. Both also disregard the public interests.

Besides the professional and practical aspects of this case, pharmacists should not forget there is a legal side to it, and this is generally forgotten in the attempts made by some members of the pharmaceutical profession to secure justice for themselves.

A physician has a legal right to dispense medicines of any quality in almost every state of our Union, and the pharmacist has no legal right to practice medicine, insofar as diagnosing and prescribing are concerned.

Not a Square Deal.

That this is not a square deal everybody must admit—but whose fault is it? Who put unjust laws upon the statute books? Whose activity put these laws there, and whose inactivity made it possible?

The prescribing physician does not care whether he is legally allowed to dispense or not, because he does not want to dispense, for he is able to treat his patients intelligently and satisfactorily by prescribing for them and allowing the pharmacist to dispense the medicine.

The dispensing doctor cannot see it

that way, and much as we may regret the fact, he has the legal right to do what he is doing.

But why should the pharmacist compare himself with the dispensing physician? The great majority of these dispense ready-made tablets, pills or mixtures, and receive their knowledge of therapeutics from the label on the bottle or the circular sent out from the factory.

When a doctor has arrived at such a stage of his practice that he is content to confine himself to the ready-to-take prescriptions of the manufacturing houses, we claim that he might just as well adopt all the other methods of a low grade drug store, and here it is not called self-dispensing, but counter-prescribing.

A counter-prescribing druggist by his practices places himself upon the same level with a dispensing physician. Both are wrong, neither is right, and the public is deceived and does not get a square deal.

A Menace to Pharmacy.

Counter-prescribing must be stopped sooner or later, for the good of pharmacy, and as a result of the constant hammering on this question by both pharmacists and physicians, a decided change for the better has been made manifest. But still there is too much of it. The fault seems to lie not so much in trying to usurp the functions of the physician as it does in the inability to overcome an inherent weakness of long standing and a desire on the part of the pharmacist to "even up" with the dispensing physician.

The counter-prescribing pharmacist can **not** see the mischief he is doing, but the physician can see it, and hence the righteous resentment our medical friends feel.

Seeing is believing in all things, good or bad. When a particularly harmful case of counter-prescribing is blamed on a druggist and he sees its evil side, he generally changes his course. When a heart-to-heart talk with the physician clearly defines each one's respective activities, both are likely to reform their practice.

Why Wait Until Too Late?

For this and similar reasons, it seems incomprehensible why such druggists as persist in this unprofessional conduct will not stop it until "a house falls upon them." It is not always selfishness, nor is it always greed, nor resentment against the encroachments of the doctors upon your field, but is sometimes an indefinable something that is probably best illustrated by an actual circumstance which accounts for the counter-prescribing habit.

A person who had been a customer for many years at a certain pharmacist's, came into the latter's store, complaining of a dull headache. A headache remedy of the pharmacist's own make was recommended and purchased. This remedy was free from Acetanilid, or any other possibly injurious substance; no relief was obtained, and the next day the customer again presented himself with the headache still present and a peculiar heavy feeling in the region of the stomach.

The pharmacist, naturally thinking the headache originated from some disordered state of the stomach, recommended and sold the customer a simple remedy, consisting of Neutralizing Cordial, Tincture of Ginger and Tincture of Nux Vomica.

Getting Serious.

This mixture was taken for two days and the headache still not easing up, the wife of the sick party called at the pharmacist's, stating this fact, and also that the patient was confined to the bed, with headache, heavy feeling at stomach and in addition a very severe pain in the back.

This seemed to clear matters up for the pharmacist, so he fixed up a mixture containing Buchu, Potassium Acetate and Saw Palmetto, and this in connection with a kidney plaster, would surely do the work, and the lady went home much relieved to think that they had finally got the right thing.

In another day, however, grave symptoms appeared, and, much alarmed, it was finally decided to call in Dr. M., who promptly diagnosed the

case as acute Bright's disease, one of the most dangerous of maladies and one often resulting fatally in one week.

Through adopting most heroic measures, the life of the patient was saved, although the four days' delay had almost resulted fatally for the patient. How often, however, does the opposite happen?

The Straight and Narrow Road.

"A little knowledge is a dangerous thing," but the great trouble seems to be that we little realize what very little knowledge of therapeutics and diagnosis we, as pharmacists, possess.

It is possible that physicians know almost every case of prescribing by pharmacists that turns out seriously, and naturally the pharmacist is justly blamed for doing what he has neither moral, legal or professional right to do. Cases like these do one of two things without fail—either the physician becomes a dispenser, or he warns his patients away from such pharmacists and directs them to those he considers more conscientious.

We sincerely hope that all pharmacists will give this important subject the most serious attention. Its importance demands it, for a discontinuance of unreasonable counter-prescribing will more than double the effectiveness of our propaganda work and will do much to draw the two professions of medicine and pharmacy close together.

CHAPTER LXII.

Almost every pharmacist is so situated that he could make more medicines and put up more prescriptions if the demand for them were made upon him. The demand exists, but the pharmacist is not supplying all of it.

Who is, and why? The dispensing doctor, the medicine peddler, the mail-order house, etc., is supplying an important part of this demand, because the pharmacist has allowed the laws to be so framed that this improper competition is possible.

It is not a question of justice or ethics so much as it is a question of

law. The pharmacist, by his inactivity or consent has legislated the dispensing doctor, the peddler, etc., into a good thing and himself out (or partially so) of his rightful occupation.

An Illustration of This.

To illustrate this we have only to take one example, namely, the provision in all pharmacy laws that allows anyone to sell proprietary medicines. Was there ever a greater hoax perpetrated upon the druggists as a class?

In cases that have been tried at court, it has been pronounced that a proprietary medicine is an article of merchandise when sold in original sealed packages and that anyone will be allowed to sell it. Members of Boards of Pharmacy have acquiesced in this decision and nothing further was done.

Is that all our legislators can do or can be forced to do, few, if any, knowing absolutely nothing about pharmacy or medicine? It seems so, and the paramount question with them seems to be "What is the legislation that will get us the most votes when we come up for re-election?"

Can these legislators not be made to see that the apparently innocent proprietary medicine, whether made by the million dollar firm or by the poor peddler on foot, is liable to do more harm to the public than any vicious trust?

Call a Spade a Spade.

Why not call a spade a spade? As long as these remedies are medicinal, either good or bad, why not confine their sale in the first place to the recognized purveyors of things medicinal, the pharmacist, and then the good can be sorted out from among the whole output?

As before stated, it is not a question of justice or ethics any longer as to what manufacturer will or will not suffer, but it is a question of the preservation of the occupation of the pharmacist and his art as an indispensable adjunct to the practice of medicine.

It must become, and that very soon, the leading question of the pharma-

cist's commercial activity, and the "big stick" of the N. A. R. D. must become active, wielded by every one of its members, to see that no one outside of the profession of pharmacy be permitted to sell or dispense a medicinal preparation of any character whatsoever.

There will naturally be many phases of this question that need delicate attention and exceptions will have to be made, but we must do something very soon as a beginning, looking towards a final solution of the problem.

Why These Exceptions?

The point is often made as regards the use and keeping on hand of proprietary medicines by country folks far removed from either physician or pharmacist. Such cases may be exceptional as far as the law would be concerned, but why?

Why any more so than the thousands of poor inhabitants in the large cities, who are huddled together in dark and dirty tenements, nothing more than consumption breeders, and who need the fresh air to cure their ailments?

Why should a law encourage a farmer to buy medicine from an imposter because he is far removed from a drug store and not encourage the poor diseased city dweller to remove to the fresh air for relief and cure? The law is ridiculous and it should be changed.

Already the propaganda of the U. S. P. and N. F. has made deep cuts into the nostrum business and it is a work well begun. Now if pharmacists would only become as active in legislative matters as they have been in propaganda, it would clear the track of a great deal of rubbish.

The "Square Deal" Assuming Shape.

Then by keeping up the present gait in furthering the use of the official preparations of the U. S. P. and N. F., the pharmacist would place himself and his profession upon such a high plane of humanitarianism as to compel the respect of every inhabitant.

Then the long sought for "square deal to the pharmacist, the physician

and the public" would begin to assume definite shape. It would manifest itself in a more dignified profession, because of the much greater amount of work done in it, and best of all, it would show up in the cash register in a most gratifying manner.

More money for the pharmacist would mean still more and better work, more and better clerks, and vastly improved conditions in all branches of the drug trade.

It is imperative that pharmacists take heed of this abnormal condition. The awful influence for evil that the unprofessional purveyors of medicine exert upon a community is much greater than is generally imagined.

Work for Local Associations.

Local associations should busy themselves at all times with the construction of a tentative law that will act as an entering wedge to a real pharmacy law for the protection of the pharmacists' interests. These various suggestions can then be formed into a definite bill by the Legal Department of the N. A. R. D.

Then, with the assistance of the state pharmaceutical association, a determined effort will be made to place this bill upon the statute books in as many states as possible.

When this work is accomplished, propaganda work will become effective in a most remarkable degree. While ordinarily propaganda work is in the nature of a great educational movement, there are the before mentioned obstructions in its path that must be removed by legislative activities.

And, paraphrasing Horace Greeley's famous saying about resuming specie payment, the only way to remove an obstruction is to remove it.

CHAPTER LXIII.

Many pharmacists are very much opposed to relinquish what they consider their apparent right as regards counter-prescribing. While it is an admitted fact that close and definite lines can never be drawn, it is also true that no reasonable physician is going

to ask the pharmacist to quit it altogether.

What must be done however, is to confine the practice to actual necessity or minor ailments, the same as we would have physicians do no dispensing except in cases of emergency and actual necessity.

This question has been threshed out so often in so many different ways, and with apparently so little being accomplished, that it is high time we take time by the forelock and prepare a code of ethics for our guidance in this respect.

As the N. A. R. D. has proven itself to be the retail pharmacist's greatest friend in whatever issue may have been involved, so the N. A. R. D. will now prove its sincerity of purpose in evolving a "code of ethics" for the guidance of its members that will settle this much mooted question once and for always.

The Code of Ethics.

Rule 1. A pharmacist shall not counter-prescribe, that is, he shall not prescribe, nor offer, nor recommend, any medicine or appliance of any kind for the cure of disease or sickness, **when he does not deal directly with the person so affected.** This is so apparently just that few if any pharmacists could take exception thereto, excepting only in emergency cases, but this code naturally does not apply to cases of emergency.

It is one of the most difficult of accomplishments for a physician to prescribe intelligently for a patient whom he does not see, therefore the pharmacist surely has no occasion to do what most medical practitioners would hesitate to undertake.

This first rule of our code of ethics is so apparently fair and square that none should take objection to it.

Rule 2. A pharmacist shall not prescribe, nor offer, or recommend any medicine which is by itself, or contains, a **habit-producing drug**, neither shall he prescribe, nor offer, nor recommend a **very potent or narcotic drug**, the action of which may produce dangerous symptoms or other-

wise cause untoward effects.

This rule will undoubtedly meet with the approval of all fair-minded pharmacists and should be strictly lived up to.

Pharmacists Must Not Diagnose.

Rule 3. A pharmacist shall under no circumstances **examine** or **attempt to examine** a person's body nor any part thereof, with the intention of discovering symptoms or diseased conditions, with the avowed purpose of prescribing for such conditions and for their relief.

While a pharmacist may be better able to do this than a layman, it must be remembered that such a proceeding is nothing but guesswork and the chances are all against his making a correct diagnosis. **PHARMACISTS CANNOT DIAGNOSE.**

Rule 4. A pharmacist shall not prescribe any medicine for any serious disease or one liable to become so, and this includes **all venereal and syphilitic diseases.**

This is probably the most difficult for many pharmacists to resist, while it should really be the easiest. Just why some pharmacists should consider it an invasion of their rights to be told to stop this practice is difficult to say, but all such should consider well the following:

A pharmacist knows nothing of these terrible diseases, a fact with which he is very well acquainted. Many thousands of victims of these diseases have been driven to the opium and cocaine habits, to insane asylums, and to untimely graves, for no other reason than of being deprived of skillful medical treatment.

These diseases, or properly speaking, the symptoms of these diseases, may be checked by the botchy treatment offered by one unfamiliar with them, while the terrible disease itself, **the action of the toxin on the organism**, is going on and spreading with the direst of consequences.

Our Honor at Stake.

This disease saps the victim's life and vitality just as surely and just as re-

lentlessly as though he had leprosy. Ask any intelligent physician if this is not true and he will tell you that it is only half true—that these infectious venereal and syphilitic diseases are the cause of more loathsome and filthy deaths and the ruination of more people's lives than all other diseases put together.

How then is it possible for such a physician to have get-together or co-operative dealings with any pharmacist who is reckless enough to attempt the treatment of this class of maladies?

While it may seem like stretching things pretty far to gain a point, it is our candid opinion that a pharmacist would appear much less irrational in the eyes of the medical profession by treating diphtheria and typhoid fever than to treat these terribly loathsome and blighting diseases.

Possibly you do not believe this; you cite cases where you have accomplished a cure, but you do not know the nature of these diseases. Your **cure** is but the relief of a symptom, and unfair as it may seem to you, when one of these "cured" persons dies one, two or three years later, from some of the terrible complications that set in when the initial treatment has been wrong, you are morally responsible for the death. Is it worth while?

Have you a right to do it? Have you a right to allow such a customer to cajole you into prescribing for him, just because of the possibly unmanly thought that if you **don't** do it, some other druggist will?

Rule 5. A pharmacist shall not refill a prescription when it is **not to be taken** by the person for whom it was **originally intended**. This will put a stop to the peddling of prescriptions, a prolific source of much of the bad feeling between physicians and pharmacists.

It practically amounts to counter-prescribing, for the pharmacist should know that the intention of the prescriber is to assume the responsibility.

Closing the Gap.

These five rules in a "code of ethics" cover the ground thoroughly. Let pharmacists consider them well and

make suggestions and criticisms as they deem proper.

Show it to physicians and ask their opinion on it; also ask them if they would not be glad to work in perfect harmony with any pharmacist who lived up to such a code.

Such a code of ethics, when honestly lived up to, will be the means of almost closing up the gap between the professions of pharmacy and medicine, providing the physician will meet it by refraining from dispensing or by keeping entirely out of the domain of pharmacy.

This as much for the physician's benefit as for the pharmacist's, therefore the medical man should meet us half-way—and he will. Pharmacists should take pride in assisting the N. A. R. D. in formulating and adopting such a code and then live up to it, in order that the N. A. R. D. may finally go on record as being the actual instrumentality through which the activities of two of the most scientific professions are placed on a scientific working basis, after years of almost fruitless endeavor to accomplish such a result.

When this "code" shall finally pass muster, it will be published in one of our monthly booklets to physicians and reprints made of it for use in all drug stores.

CHAPTER LXIV.

Ever since the beginning of the N. A. R. D.'s active national propaganda movement in 1909, letters have been received at National Headquarters from physicians condemning the practice of many pharmacists in allowing their names to be used in connection with extravagantly advertised proprietary medicine advertisements in newspapers.

While this condition has as yet not reached an acute stage, it is nevertheless a practice that is in vogue in all parts of the country, physicians from nearly every state having commented upon it.

A Practice Not Commended.

These physicians, according to the statements in their communications, feel that this practice is a very decided negative factor in getting together with the pharmacists, as indeed it is. A reason for this is not hard to find, and it is our candid opinion that when pharmacists regard the practice correctly, and will come to an equitable agreement with their physicians, they will stop it.

The problem is complex and difficult to handle, and for that very reason the N. A. R. D. must see that it is handled right. It is important, surely, for it is one of the greatest of obstructions in propaganda's pathway and it must be removed.

Points to Consider.

The first thing to consider is this: As present commercial conditions are such that the pharmacist feels he is almost compelled to sell the proprietary medicines advertised, he might just as well sell all he possibly can. He forgets, however, that when his name appears under the newspaper advertisement he is standing sponsor for every word printed in the advertisement—at least, the public so regard it.

The public reads the name of the medicine, the wonderfully mysterious composition of it, the alluring testimonial, and the druggist's name—that is the combination which makes the sale. In some instances, the ad. tells the people that "THE DRUGGIST RECOMMENDS THIS MEDICINE."

Now, Mr. Druggist. would you as a trained pharmacist, take a bottle of any of these extravagantly advertised proprietary medicines off of your shelves and say to your customers that you know it is good and you recommend it. Would you? Of course, you would not. But this is exactly what you are doing in the newspapers and that is why the physicians object to it.

The Ethics of the Case.

The second thing to consider is the ethics of the case. You do not know the composition of these remedies and hence cannot speak intelligently about them. They are an article of merchandise as far as their sale is concerned, to be true, and you may consider advertising them no different than you would the advertising of tooth brushes, soap or perfume.

But it is different. When you advertise your own preparations or your own sundry stock, you are the one who makes the assertions and claims put forth in the advertisements, and you alone are responsible for the truthfulness of them, hence you are careful and truthful in what you say.

With the over-advertised proprietaries, the case is exactly the opposite. False and extravagant claims are made for them, and these claims are published for absolutely no other reason than to separate the public from its money. And the pharmacist O. K.'s every statement made! Is that honorable to yourself, or justice to the public, or a square deal for the physician? Decidedly not.

The Important Issue.

The third thing to consider now is, as J. M. Barrett, the N. A. R. D. field representative, so aptly puts it "**what does the pharmacist get in return, if he quits it?**" The business in objectionable proprietaries has been gradually built up with the consent, if not the assistance of the pharmacist; in some instances it is used by pharmacists to counteract the practice of dispensing by physicians, the prescribing of ready-made goods by the physician, direct buying from pharmaceutical houses by physicians, etc., etc., ad libitum.

Backing up these advertising fakes with your own name is possibly a well-established custom, but really we don't think there is a pharmacist in the United States who would not quit it, "**if he got 'something just as good' from the physician in return.**"

Now we are getting at the root of

the evil and at a method of eradication. Nearly everyone will admit that the practice is wrong, both in theory and in practice, just as everyone admits that dispensing by the non-pharmacist physician is wrong.

The Give-and-Take Platform.

To quote Mr. Barrett again "the best place to bring this much discussed and vexatious problem is to get-together and other meetings of physicians and pharmacists, **and on a give-and-take platform.**"

"Admit to the physicians that it is unprofessional, unethical and that it is purely a commercial proposition, brought about as a matter of self-preservation, just as his claim of self dispensing, nostrum prescribing, direct buying, etc., is made as a matter of self-preservation.

"Express a willing and anxious disposition to quit this practice and to enter upon a more ethical one, and there will be nothing left for him but to meet you half way and on a fair basis, by prescribing and otherwise becoming active in propaganda work."

The Losers.

Mr. Barrett's views are logical and in perfect harmony with sound propaganda teachings. In this manner the pharmacist gains more than he loses, and the real loss falls upon the newspapers and the fraudulent proprietaries, as it ought to.

The pharmacist should of necessity make capital out of the physician's demands, the same as the physician does in demanding things of the pharmacists. This provides for a proper equilibrium in getting business and making a living.

The local association or the local druggists should agree upon some plan, the most moderate of which would be to have the manufacturer state at the bottom of his ad "For sale by druggists." Some such an agreement, signed by all druggists and presented to the doctors will prove to them that you are "ready with the goods" and willing to get on to a give-and-take platform with them.

The physician that will not become

active in your behalf and in the interests of the propaganda movement when you comply with his wishes in some important respect, like the one here discussed, is certainly not worth bothering about any further.

CHAPTER LXV.

The literature sent to physicians in January, 1910, consisted of a 12 page booklet only, in place of the eight page booklet and separate letter, as formerly.

The booklet is entitled "The Therapeutics of Thirty-Three Official Preparations and Their Origin." One page is devoted to the following:

The History and Object of the U. S. P. and N. F.

Through the efforts of Dr. Lyman Spalding, of New York City, from January, 1817, to December, 1820, the first United States Pharmacopoeia was published in Boston, December 15, 1820.

It has been revised regularly about every ten years since, by a revision committee, consisting of delegates from incorporated state medical and pharmaceutical association, incorporated colleges of medicine and pharmacy and from representatives of the Army, Navy and Marine Hospital Service.

The object of the Pharmacopoeia is twofold: It contains a list of drugs and preparations for the physician's use, whose composition, purity, strength, uniformity and therapeutic action are standard, above question and scientifically correct. It contains, for the pharmacist's guidance, the correct working formulas to make these preparations and reliable tests to establish the purity, etc., of official drugs and chemicals.

The National Formulary was first published in 1888 by the American Pharmaceutical Association and the fourth edition is now in process of revision. Its publication was a matter of necessity to make uniform the composition of many remedies used by physicians in various parts of the country, and which are not included in the Pharmacopoeia.

These two books, the Pharmacopoeia (U. S. P.) and the National Formulary (N. F.), contain some fifteen hundred of the best medicines in existence today, for the intelligent treatment of almost every known form of disease.

The following letter appears on page 3 of the booklet:

Dear Doctor:

It is our aim, in this booklet, to present to you, short, concise descriptions of three thoroughly reliable preparations of the U. S. P. and N. F.

These preparations have been before the medical profession for many years. Their importance as remedial and curative agents has never been questioned.

We believe, therefore, that they are entitled to careful consideration by medical practitioners. We feel positive that their use will create that definite and expectant therapeutic action so much desired by the physician.

To refreshen the memory, the following four pages are devoted to a brief review of the thirty preparations to which we have called attention in 1909.

The short paragraphs on "How the pharmacist assists the physician" will doubtless interest you also.

Most sincerely yours,

Thos. H. Potts,
Secretary.

P. S. If you do not possess that valuable booklet, "Therapeutic Information," we will be pleased to send a copy free upon request.

On the next four pages is given a brief review of the thirty preparations, which the N. A. R. D. has called attention to in 1909.

Three pages are then devoted to the January preparations, as follows:

Acidum Hydrochloricum Dilutum, U. S. P.

Composition.—Diluted Hydrochloric Acid contains 10 per cent of absolute Hydrochloric Acid and 90 per cent of Water. It is a clear, colorless and odorless liquid and of a very sour taste.

Dose.—The average dose is 1 Cc. (15 minims). On account of its sour taste it may be prescribed with some very strong aromatic, as the Compound Tincture of Cardamom, U. S. P., and directed to be taken with a large draught of water, through a glass tube. It is best administered during or immediately after a meal.

Therapeutics.—Diluted Hydrochloric Acid is one of the most trustworthy digestants known at the present time, many authorities placing it far ahead of Pepsin or similar drugs.

Remarks.—This preparation offers an opportunity where palatability must give way to efficiency. It is almost impossible to cover the sour taste of it when given in medicinal doses, a large draught of water being probably the best for the purpose.

There is evidently no nostrum on the market containing this valuable digestant in medicinal doses, for the simple reason that a nostrum to become popular must be palatable; in fact, palatability seems to be the one chief claim made for the use and sale of most nostrums.

An intelligent study of the action of Diluted Hydrochloric Acid by the medical practitioner will place in his hands a most valuable therapeutic agent.

Elixir Sodii Salicylatis, N. F.

Composition.—This Elixir contains 5 grains (0.34 Gm.) of pure Sodium Salicylate in each fluidram (1Cc.) in a vehicle of Aromatic Elixir. It is always prepared fresh, when required for use.

Dose.—The average dose of this Elixir is 1 fluidram (4Cc.) after meals and well diluted. A much larger dose than 5 grains of this salt is often to be administered, sometimes as high as 30 grains. This is readily accomplished by prescribing (in the case of 30-grain doses), 240 grains of the Salicylate to each fluidounce of the mixture.

Therapeutics.—The chief use of this preparation is in acute rheumatism, acting as an anodyne and antipyretic; it also lessens the liability to cardiac complications and shortens the duration of the attack. It is a powerful diaphoretic and an efficient cholagogue.

Remarks.—Tablets of Sodium Salicylate should receive little favor from physicians, as their action is generally very irritant, unless accompanied by large draughts of water.

According to Moule, Sodium Salicylate is a specific in acute rheumatism, but it must be used in larger doses at first than those commonly employed; in severe cases, 30 grains every hour.

Sodium Salicylate is incompatible with mineral acids or with any preparation containing such.

Syrupus Scillae Compositus, U. S. P.

Composition.—Each dose of this Syrup, often called Hive Syrup, represents $2\frac{1}{2}$ grains each of Squill and Senega and contains about $1/16$ grain of Tartar Emetic (Antimony and Potassium Tartrate). It is a heavy, clear, amber-colored syrup.

Dose.—The dose of this Syrup is 30 minims (2Cc.) It should be administered cautiously to children.

Therapeutics.—Compound Syrup of Squill is a stimulant expectorant, having also emetic and diaphoretic properties. Its sedative influence is of considerable value in acute bronchial conditions.

Remarks.—This Syrup was originally introduced as a remedial agent in spasmodic croup for its nauseant effect. In croup, from 10 to 30 minims may be given every ten minutes, until the nauseant effect is developed.

It is one of our oldest medicines and, having both sedative and stimulant effects, its place in the physician's armamentarium is assured, as its trustworthiness and intrinsic value are beyond question.

Page 11.**How the Pharmacist Assists the Physician.**

The trust and dependence of the patient on the physician is directly reflected in the trust and dependence of the physician on the pharmacist.

The physician must often make use of a knowledge of preventive medicine, hygiene, sanitation and methods other than the use

of drugs in the treatment of disease; but beyond all these, and as a basis for intelligent work, is that great domain of disease for which the pharmacist must give to the physician the remedy.

It is the pharmacist who by his science, his art and his skill furnishes the physician with nature's remedy in the form of an active preparation, and failing in this, failing to find a remedy in nature, he proceeds to make it artificially.

His greatest concern, his constant task, and in fact the life study of a capable pharmacist is in making medicine and medicinal preparations more exact, more uniform and permanent, and more therapeutically active, in order that the physician may have the best possible agent to combat the various diseases he is called upon to treat.

A capable pharmacist reaves nothing to chance. He has the patient's as well as the physician's interest always at heart, and therefore he is worthy of the physician's full trust.

Page 12.

It is the steadfast purpose of the National Association of Retail Druggists to work in the direction of bringing the pharmacist and the physician closer together—to work in harmony.

It is manifestly to the advantage of both physician and pharmacist that one should work for and assist the other, and that both should work for the public good.

Such principles are not only correct from a scientific and humanitarian standpoint, but when carried out faithfully are the best from a business standpoint.

It creates new work and new business for both pharmacist and physician.

CHAPTER LXVI.

Every druggist is doubtless familiar with the true meaning of the expression, "To the victors belong the spoils." What was true in Andrew Jackson's political days is just as true today in a business sense.

The business man of today can only get something by fighting for it, and if he is successful, the spoils belong to him. There is only one weapon that can be used effectively in these days of business warfare and that weapon is advertising.

It is not enough that the pharmacist be capable, it is not enough that he dispense only quality drugs, nor is it enough that he be conscientious, he must also impress the facts upon the public—he must advertise.

Must Overcome Inaction.

Druggists must realize that to build up a business they must do something to attract business, as only a small part of the actual business existing comes to him uncalled for.

You know this is true in the sale of drug sundries, soda, cigars, candy and other articles of merchandise, and it is just as true of the official preparations, prescriptions, etc.

The sooner the druggist realizes this fact in regard to his prescription business and the sooner he becomes active in real propaganda work, the sooner will he be a victor to whom will come the spoils.

One of the most effective beginnings that can be made by any pharmacist to advertise his official preparations to the members of the medical profession is by preparing a list of physicians' names and then arranging to have these receive the special literature prepared each month by the N. A. R. D.

Benefits Are Many.

The benefits of such a course to the pharmacist are so apparent, and have been dwelt upon so frequently in these chapters, that every pharmacist should know them by heart. All that remains to be done is to take advantage of this most excellent advertising feature and get some of the profits that rightly belong to you.

Some pharmacists are averse to this movement, thinking it is compulsory that physicians be sampled with those preparations that are being 'exploited.' Such, however, is not the case. It is as a matter of course of material advantage to the pharmacist to follow up any good intention on the part of the physician that a letter may have produced by giving him samples of the preparations and allowing him to test them.

Pharmacy Should Assert Itself.

But any pharmacist who has neglected this work entirely on account of such a misunderstanding, should at once begin active preparations in letting it be known to his physicians that he is able to supply quickly and correctly any official preparation, etc.

The monthly literature that is being sent out by the N. A. R. D. can well be supplemented by another letter of the pharmacist's own, to be sent two weeks later. This second letter will be of great value where sampling is not done and should contain a brief and concise review of the N. A. R. D. letter and one or two other paragraphs of general information.

But under no circumstances should this work be neglected entirely.

An Organizer's Views.

The following extracts from an address of Mr. J. C. Singer, the Illinois representative of the N. A. R. D., are concise and to the point and worthy of careful analysis by all druggists:

"Conceding that the physician diagnoses a case properly, he knows the remedy, and naturally he should prescribe the best remedy. According to our highest authority, the U. S. P. and N. F. preparations are the best and highest standards of excellence. The physician's desire is to be ethical, and to be so he would work along ethical lines to get the best results. Getting the best results means a reputation, and this in turn means greater financial returns. Hence it would appear that a physician has neither ethical nor financial reasons for not writing prescriptions for U. S. P. and N. F. preparations.

What the N. A. R. D. Is For.

"The N. A. R. D. was organized to better the condition of the retail druggist, both financially and professionally. This is a dual proposition. The N. A. R. D. is truly doing its share and there are no reasonable excuses why the retail druggist should not do his, as regards the manufacture of the U. S. P. and N. F. preparations whenever possible.

"At the present time the N. A. R. D. is doing fully 75 per cent of the work. Its method of circularizing physicians each month is the greatest educational movement ever undertaken by any association at any time and when the druggist has done his part, most gratifying results have been obtained.

The Remedy Is With the Druggist Himself.

"If a druggist is really looking to the financial betterment of his business, the propaganda work as outlined by the N. A. R. D. and published in NOTES offers the most effective entering wedge. The drug store laboratory each week in NOTES is a storehouse of knowledge and gives detailed information by means of which any person truly entitled to the name of pharmacist can make perfect U. S. P. and N. F. preparations.

"Never before in the history of pharmacy has so much practical and useful information been placed before the retail druggist, nor in so comprehensive a manner, as is being done by NOTES at the present time, and has been doing for some time past.

"The N. A. R. D., through its propaganda efforts, is bringing about conditions that druggists have demanded for years. The opportunity is now ripe to take advantage of these conditions, therefore let neither inaction nor any pernicious influence deter you from doing your duty to yourself, to your family, and, last but not least, to your brother druggists. The time is here now, and, Mr. Druggist, it is up to you."

CHAPTER LXVII.

Commenting upon the very important subject in chapter 64, page 206, namely, "the recommending of proprietary and fake medicines over the druggist's signature in newspaper advertisements," a pharmacist from the state of New York asks the following pertinent question:

"I do not see why it is a detriment to my professional standing to have my name appear on the bottom of such ads. as the following:

Hexamethylenetetramine.

The above is the name of a German chemical, which is one of the many valuable ingredients of Blank's Kidney Remedy. Hexamethylenetetramine is recognized by medical text books and authorities as a uric acid solvent and antiseptic for the urine. Take Blank's Kidney Remedy as soon as you notice any irregularities and avoid a serious malady. Jones' Drug Store.

"I do not recommend this remedy, as I merely appear as an agent. I must

admit that if I could trade this whole proprietary business for half of its volume in prescriptions, I would drop it like a hot potato, even though my average daily profits on Blank's five preparations amounts to over \$1.50."

The Druggist Does Recommend.

But this druggist **does** recommend this medicine. His name has the value of a recommendation in the public's opinion when attached to such an advertisement. He virtually signs the article and becomes its sponsor, in exactly the same manner as when he signs a check, a note, a letter or an order, and no stretch of the imagination nor of law can make it appear differently.

We must admit that this is a very delicate and also a very complex question to handle, but it becomes none the less imperative that a way must be found to handle it.

The one important factor that continually bobs up in matters of this kind is the financial one. This druggist claims that his average daily profits on this one line alone yields a profit of \$1.50 (amounting to \$4.50 in sales) and if he quits the sale of it, his daily sales would decrease by just that amount.

A Bold but Winning Move.

Knowing the feeling of physicians generally on this subject, our argument is this: If the druggist will refuse to allow his name to appear on these advertisements, many of them representing the rankest kinds of fakes, and make capital of such action by telling his physicians of it, he will necessarily gain more than \$1.50 per day by doing so.

To substantiate this claim, we append extracts from two letters received from physicians, bearing on this particular phase of the subject.

The first of these two is from a well-known and prominent physician in a central New York city, who closes his letter as follows:

"I regret to observe that some of your active members in ——— still find it expedient to attach their names to various nostrums advertised in the daily press, guar-

anteeing cures. Naturally, I endeavor to direct my patients elsewhere."

The second letter is given in full, and is from a physician in Pennsylvania:

"Gentlemen: Referring to your literature from time to time received, I am writing to say that it is much appreciated by myself and has been the means of better therapeutical practice here.

"Getting away from the nostrum, or rather the thoughtless habit of prescribing them, is one of the good things accomplished. Keep it up—in time we can put the nostrum vendor out of business and raise the standard of prescribing.

"And while you are at it, get after those retail druggists who are advertising and pushing patent guaranteed cures in the newspapers over their own names."

Figure It Out Yourself.

Now, as a simple business problem in arithmetic, it is manifestly more profitable to fill prescriptions than to sell this class of proprietaries. Just figure the profits from the sales of such preparations for the past week and then figure how many 50c prescriptions it would take to equal it. You will find it will not be very many.

While physicians would naturally be pleased to see the sale of almost all proprietaries stopped, very few of them can give a valid reason why the druggist should not sell them when called for.

This is not the point of contention. What the physician objects to, and very properly, is that druggists recommend them over their signature and then expect physicians to send prescriptions to them.

This is inconsistent with every form of economics and the druggist should realize this fact. How can it be otherwise?

The Physician's Viewpoint.

The physician knows that these over-advertised proprietaries are claimed to do impossibilities, are of direct harm to many people and in direct opposition to the intelligent treatment of disease.

How, then, can he be unconcerned about the druggist who recommends and even guarantees them? It's impossible.

Druggists should look at this proposition in a big way. Calculate the possible advantage in a financial way and also in the acquisition of prestige and then if it seems feasible, give it a trial.

Get together with your brother druggists, determine upon a plan of action, and inform your physicians of the change you are about to institute—and then watch results. You will find few physicians who will not commend your laudable efforts and reward you for it promptly.

What Do You Sign?

Read every one of these advertisements very carefully and note whether the statements therein made would be made by yourself, over your own signature, if you were to write the copy for the ad. That's the proper way to look at this question, and the only way.

Would you do it?

Advertise your business in such a manner that people will look to you for any and all medical supplies they may want. Let these medicines be advertised as much as may be, but do not add fuel to the fire by O. K.-ing every extravagant claim made for them.

In that way you will lose little, if anything, but your chance for gain from the physician will become very great. Think it over, then act.

Drug Store Advertising and Salesmanship

Intelligent Publicity is the Enemy of Every Sort of Ruinous Competition

CHAPTER I.

It seems to be a fact that the more theories, articles, pointers, suggestions, etc., laid before the average druggist respecting his advertising, the less they will be acted upon, as it seems to result in a compound conglomeration of ideas and effort. This is because he has not yet learned what advertising really is.

It is very evident that before any outside advertising can produce real results, the inside advertising must be well attended to, and for this reason the following things must be done, and done aright:

Seven Rules; Three Relating to Cleanliness.

1. Keep yourself neat and clean.
2. See that your clerks are neat and clean.
3. Keep your store neat and clean.
4. Keep your goods up to a high standard—always.
5. Make your store bright in the evening.
6. Keep your windows well dressed at all times.
7. Have at least six neat, snappy, well-worded placards placed in appropriate locations in the store, and change them frequently.

While cleanliness in a drug store may not be commented upon by patrons, lack of cleanliness always causes comment and a continual loss of custom. This is a fact.

Who does not like to see a well dressed man or woman? Everyone can not dress well when at work, but everyone can and must who waits upon customers in a drug store.

If clerks and proprietors would rea-

lize this more it would materially increase the yearly sales, however unconsciously this result may be accomplished. No one wants to be waited upon by a clerk in his shirt sleeves, for shirt sleeves always mean dirty shirt sleeves, except for the first few hours of wearing.

In the Grocery or Market.

Does it not appeal to your better nature to see a grocery clerk or one in a meat market, dressed in a clean white apron or coat, or would you think just as much of the place if they looked dirty, which their kind of work can easily make them.

A tan-colored corduroy coat, with or without vest, according to the temperature, is comfortable, looks dressy and is eminently proper. Buy them one or two sizes too large as they shrink considerable in the first washing.

Put on a clean collar every day and keep your shoes polished. Never forget to be clean-shaven even if it must be done every other day. A slovenly looking clerk or employer is not worth \$15 a month for holding or getting trade. This applies to every drug store, city or country.

We have gone into detail here as regards cleanliness for it is so important that many clean druggists have built up and held and enlarged their trade by cleanliness alone and have spent very little money in outside advertising.

Do not think that advertising means spending a lot of money for printing and postage—not just yet. We will endeavor to cover this field thoroughly in the following chapters, as regards both inside and outside advertising.

Type-Written Letters Advocated.

Mr. Pedigo, one of Chicago's most successful North side druggists and a strong N. A. R. D. worker, believes that outside advertising should consist solely of a type-written letter, addressed to the heads of families, and sent out by messenger every three months.

The mailing list is easily procured from the election or road commissioners and is generally perfect and up-to-date. These letters are enclosed in the addressed envelopes and sealed. One thousand of these letters is a fair average for one store, and in sending them by messenger, a postage bill of \$20 is saved. These letters should not cost over \$5, envelopes and delivery included. A copy of one of these letters for this time of the year is as follows:

Chicago, October 15, 1908.

Sam D. Jones, Chicago, Ill.

Dear Sir: You have doubtless heard that our drug store has a very good reputation regarding the filling of prescriptions. I am pleased to say that such is really the case, and that I am proud of it. I certainly do all in my power to have everything just right, and am never satisfied until it is so.

We never hurry a prescription, but fill it promptly and deliberately. I have only reliable clerks and do not overwork them, and as I do not substitute, every prescription that leaves the store is just exactly what the doctor wants his patient to get. The doctors know this, therefore, our well known reputation.

We prepare a cough syrup that is very effective and that contains no harmful drugs, opiates, etc.—and so positive are we of its beneficial action that we absolutely guarantee it. It comes in 25c and 50c sizes.

Our cold capsules also are composed of reliable drugs, and will cure colds, chills and such affections. The price is 25c.

My cold cream is a very pure, white preparation, finely perfumed, and a very useful toilet necessity. Prices, 10c, 15c, 25c and 50c.

We keep our store open from 7:00 in the morning till 12 o'clock at night, will gladly deliver medicines and other articles to your home, and our telephone (L. V. 356) is for your accommodation, to use or to telephone your wants to us.

Respectfully yours,

LEE M. PEDIGO.

Mr. Pedigo has experienced very profitable results from these letters, believes in them thoroughly, and he has tried many schemes.

Placards for Inside Use.

As examples of placards for inside use, the following two are good. They will give you the proper idea. They are made from cardboard, using different colors, white, pink, light blue, etc., which can be had from printers or paper dealers. Don't get these cards too large—8x10 inches is a good size.

**Our
Cough Syrup
Has Cured Coughs
for 17 years**

It's good Price 25c

**Our
Fountain Syringes**

are made from

PURE GUM

and every one is guaranteed.

Prices 65c to \$3.00

CHAPTER II.

Advertising may be divided into two classes, inside and outside. Outside advertising brings people to your store through the use of the printer's art—signs, circulars, booklets, letters, newspapers, etc.

Inside advertising is your own personal individuality, as applied to the seven cardinal principles mentioned in the previous chapter.

Personal Individuality.

If your own personal individuality is worth anything in the drug business, it is worth enough to make a comfortable

living for yourself and family out of your store.

Believe in yourself, this is half the battle—it is the force behind the will, and this will ("I will") stimulates your thought, and the thought makes the action—this is the whole theory of advertising.

Every sensible theory of advertising commends the proposition of simplicity, of concentration, to advertise only one thing at a time.

You know this to be true, you have read it time and again, have seen it demonstrated successfully, yet when Friday morning comes around, your old foggy ideas get the better of you, and you fill your windows with any old thing that is handy.

Money in Windows.

Mr. Pharmacist, there is money in your windows—good, solid, hard dollars—and it is worth a little of your time to think about it and get these dollars.

You have never made any money out of your windows in **your** way; so now try the **other** way, and see if the result will not be different—you cannot lose, if you never made anything before.

Next Friday, when your windows are cleaned, put some white oilcloth in the bottom of your window and tack it down with brass headed tacks. Then you have a foundation that will set off nicely any simple display.

The Display.

Now put in your cough syrup display—use as many bottles as will look well, avoiding crowding, twelve bottles look better than twenty-four, unless you can make a fair-sized pyramid. What you want is to make people come in and buy your cough syrup, not to see how many bottles you can crowd on your pyramid without falling off.

The only way this can be done is to just put enough Cough Syrup in the window so people can see that you have it. Then put the following three placards in the window, made from white or pink bristol board, about 8 x 10 inches:—

"Our Cough Syrup has cured coughs for 17 years. It's good. Price 25c."

"There is only one right time to cure a cough, that is as soon as it comes."

"Our Cough Syrup is an Insurance policy against Throat and Lung Troubles."

Results, \$ \$ \$.

The result of this window will be the sale of cough syrup—it will sell cough syrup to people that you have never sold before—it will sell many bottles to people that heretofore have purchased patent cough syrups—it will make you a better druggist in the people's eyes, and help kill off the many poor patent cough syrups on the market.

Window Fixtures.

Of great help to you in improving your window display is to have for each window, four stands: one a cube with sides about 8 or 10 inches; one a cylindrical stand, about one foot high and seven inches in diameter; one, a piece of plank, about two by ten by twenty inches; and a fourth to consist of a small stand with two or three shelves.

The first three of these stands should be of solid wood, sandpapered smooth, painted white or blue or any other suitable color, and varnished.

They are then always ready for use

**SPLENDID
COUGH
MEDICINE**

We prepare a Cough Medicine that we are not afraid to put side by side with any on the market. We have seen it out-class numbers of the muchly vaunted remedies, and we have heard of scarcely so many where it did not prove satisfactory. We call it

**DR. PIGALL'S
COUGH CURE**

The Price is 25 cents. If you buy a bottle and are disappointed, come back and we will return your money. We want no man's money who doesn't think that we have given him his money's worth.

**GEORGE B. FARRAR
DRUGGIST AND OPTICIAN
987 Ogden Ave., Cor. Fairfield**

and will last an ordinary life time. They form a decoration in themselves and are always to be preferred to the

ordinary covered cigar box, the paper of which generally bleaches and presents an unclean appearance in one or two days.

Ideas for November.

Supposing your store has three windows, the following are suggestions for November Display:—

First week—Cough Syrup, Hot Water Bottles, Chest Protectors.

Second week—Tooth Brushes, Stationery, Hair Tonic.

Third week—Flavoring Extracts (for Thanksgiving), Cough Syrup, Musical Sundries.

Fourth week—Hot Water Bottles, Soap, Corn Cure.

It would be well to procure an ordinary composition book of 52 or more pages, and enter your plans therein; one page for each week, and note your displays on the page, one, two, or three, according to the number of windows you have.

Think out your displays, according to the seasons, and by digesting the efforts of others as seen in the various drug journals, and in other druggists' windows, you will soon have a "Window Display Book," with 52 changes for each of your windows.

When you have had a practical trial at each of these displays and have made necessary changes, you will never again want for a suitable display.

Sampling.

Geo. B. Farrar, a prominent West Side N. A. R. D. druggist in Chicago, pins his faith to advertising by sample, with which he has won grand success.

At this time of the year Mr. Farrar sends out two dram samples of his Witch Hazel Cream to about 700 families, and in this manner gets about all the toilet cream business in his neighborhood, selling very little of the patent creams generally called for.

So instead of making a profit of 7c or 8c on a 25c bottle, Mr. Farrar makes a profit of 18 to 20c on his 25c size. Whenever customers call for glycerine, glycerine and rose water, or the common "chapped-hand" preparation, they receive a sample of the Witch Hazel cream.

Cold Tablets

Laxative Quinine

We put up some little tablets that are the best things we have ever seen for the cure of

La Grippe, Hard Colds, Influenza Cold in the Head, and other Inflammations

You can rely on the tablets. They do not excite or cause pain, but they do break up the attack in quick time and furnish a source of relief that is immediately welcome.

25 CENTS A BOX
Guaranteed Satisfactory or Money Refunded

GEORGE B. FARRAR
DRUGGIST AND OPTICIAN
987 Ogden Ave., Cor. Fairfield

However, aside from this exception, no samples are given to customers in the store.

This preparation has merit, naturally, otherwise no permanent sale could be worked up.

The cost is comparatively small, requiring about 5 gross each, of two dram vials, labels, corks and circulars, and about one and one-half gallons of the cream, total about \$9.00.

Headquarters for Cream.

This project has virtually made Mr. Farrar headquarters for Toilet Cream, and naturally has been a stimulus to his other departments.

Another plan that causes additional trips to the cash register in Mr. Farrar's store, is wrapping small circulars in packages of his own-make specialties. These circulars are 3 x 4 inches.

A reproduction of two of Mr. Farrar's circulars are shown in this chapter.

Of course, advertising by sample is really special advertising, but if any druggist wants to become real headquarters for any one particular thing, let him sample it, and success is sure to follow.

CHAPTER III.

Did you ever realize what a powerful and valuable selling factor it was to have a clean, nicely arranged show case, where the goods were not crowded, and when three or four small descriptive price cards accompany the goods.

The greatest fault with your show case is that you have so many things in it, packed closely together, that after twelve or fifteen sales, everything looks topsy-turvy.

Just look at any one of your show cases this moment and see if such is not the fact. This will not do, as it does not appeal to your customers' views of the "eternal fitness of things."

Show Case is For Show.

A show case was never intended to be a place for the storage of your entire stock. It is intended for "show," and this show must be so arranged that when one or two articles have been sold, you must replace them from other stock, to keep up the looks.

One of your show cases must be changed or rearranged every week, and your clerk should take great pride in doing it thoroughly. If you have no clerk to do it, you must do it yourself, and you will some day have enough extra business for your labor that you will be able to afford a clerk.

To do a successful "show case" business, you must have a modern show case, one with three shelves firmly attached inside. This, with the base, will give you four display surfaces. Now place some white or light colored paper (crepe paper will answer nicely) on each shelf, and your case is ready to receive its goods.

We will suppose now that you have such a modern four-shelf case, and your soap and toilet goods are to be the contents.

How to Display Soaps, Etc.

Put your soap on the bottom of the case, including antiseptic soaps and shaving soaps. On the first shelf from the bottom, place your face creams, face lotions, talcum powders and goods of this description. On the next shelf place face powders—nothing else. On the top shelf place nail and hand brushes, puffs and puff boxes, soap boxes and bath brushes.

Other articles of this class that you may have a demand for will find a suitable place in this case, as shaving brushes, bath-rags, etc. We would like to emphasize bath rags—one of

the best soap-sellers there is—give one free to each of your customers.

Those articles that belong to this class that find no suitable place in the case, can be displayed nicely in glass jars on top of the case.

Show Case Cards.

Now prepare eight cards, about 2½ by 6 inches, or smaller, of white bristol board, with the following inscriptions, and put them in their proper place in the case:

1. Ask for a face rag—it's free.
2. This Soap is clean soap.
3. No better Soap made, 4 cakes for 25c.
4. This Talcum Powder is just right. Price 25c.
5. We recommend this Face Powder; it is perfect. Price 40c.
6. Our Toilet Cream makes your face as lovely as a rose.
7. These hand brushes are made for good service.
8. Our own Cold Cream is what you should ask for; if you desire the best.

The encroachment on the sale of this important line by other dealers is occasion for alarm, and must be met by prompt and judicious advertising, by personal talks with customers, and by carrying goods of merit only.

The hundreds of cheap soaps and toilet preparations sold have no actual merit and every sale hurts the good article—many customers being after cheapness, and for such no "goods of merit" exist—these you must teach otherwise by explaining the difference.

Your Goods Must Have Merit.

Ladies will generally be willing to spend from twenty-five to fifty cents more for a "complexion beautifier" if they can be assured that it has merit—and so with other articles.

It is the good, meritorious articles you sell that build up your business, your ideas to the contrary notwithstanding.

Toilet soaps are generally in fair demand, but why not sell the bulk of them? Everyone uses them and you

certainly ought to find a way to sell your share.

Why can't you be headquarters for soap in your neighborhood? Soap is sold to everybody and someone is doing the selling? If not you, why?

Everybody Uses Soap. Who Sells It?

The demand is great for five and ten-cent soap, with ten-cent perfumed goods the leader.

Buy them right, in assorted odors and fancy wrappers, and pay cash.

Sell the 5c kind 6 for 25c, and the 10c kind 3 for 25c, also some of your best soap at 4 for 25c.

With the higher priced perfumed soaps, the average druggist has little success, and unless the trade is very fastidious, keep only one box each of 25c, 30c and 50c soap on hand.

In selling goods, do not be too eager lest you get into the habit of making a choice that people do not desire, but let your effort be such as if your ability

that produced positive results in the shape of dollars and cents.

While most money put into church program advertising, etc., is considered as a donation and barren of any results, this monthly ad., of good size and in a regularly issued paper, was productive, as the church people responded willingly.

Do You Create a Demand?

One positive fact sticks out high above all others in advertising—it is "CREATING A DEMAND." You

Do you know Krizan?
He is our druggist on the corner.
Everything first-class.

We keep always in stock the latest remedies, rare chemicals, surgical goods, anti-toxin, crutches, bandages, trusses, chest protectors fitted perfectly, homeopathic and "mother" tinctures and pellets. Complete stock of Munyon's and Humphrey's remedies. In fact, the best stocked drug store in Englewood.

William Krizan
Prescription Druggist
5501 HALSTED ST. BULLYARD BLOCK
PHONE WENTWORTH 583





BE WISE

Read between the Lines
Delays Are Dangerous

Krizan's Syrup of White Pine and Tar Compound, the best cure for the worse cough, 25 cents.

'Twas a cough that carried him off
'Twas a coffin they carried him off in.

WILLIAM KRIZAN

Prescription Druggist
5501 HALSTED STREET
PHONE WENTWORTH 583

to pay rent depended upon that one particular sale.

Advertising in Church Papers.

William Krizan, a prominent N. A. R. D. worker in Chicago, has built up a substantial business by attending strictly to his windows and pushing such special side lines as soap and candy, with his inside advertising.

There is a religious publication published in Mr. Krizan's neighborhood, "The Methodist Tidings," 12 pages, and issued every month, that goes to over 1,000 homes in the vicinity of his store.

We reproduce two of Mr. Krizan's ads. from this publication that have attracted more attention than usual and

have doubtless read that 95 per cent of all business undertakings prove a failure (either actual or comparative). This is a fact, because the average man in business is simply an order clerk, he is content to supply a demand—without making an effort to "create a demand."

CHAPTER IV.

In trimming your windows remember always that it is important that your windows look clean before the goods are put in. The glass itself, the base, and your stands should all be bright and sparkling with cleanliness, as also your show globes.

As soon as any sediment or cloudiness appears in your show globes, empty and clean them, and filter the color back into them.

It is as much of a reflection upon you to have dirt of any kind in any part of your window as it would be if you should send a soiled letter to one of your customers.

When your windows are thus properly prepared, an effective display can easily be made with a very few articles and price placards.

Pasting Signs on the Glass.

Unless the nature of your display absolutely compels it, do not paste any signs on your window glass.

It discounts your display by about one-half.

Have you ever taken a good look at a successful merchant's window? Have you noticed how simple it is and how everything seems "to just fit?" How people look at it and pass complimentary remarks about it?

The general public are all **possible** customers, but only the pleased ones will be **probable** customers.

Everybody—poor, rich, laboring man, professional man—has an eye for art, "for the eternal fitness of things."

So your show, if a display at all, will attract each and every one.

Window Dresser a High Salaried Man.

To put yourself into the proper spirit for dressing your show window, just consider your salary for **Fridays** to be \$25.

Then pitch in and earn your salary.

Here is a window that will sell goods:

Place your 3-shelved stand in the middle, well back; a stand on either side and towards the front; and the plank in the front part of the window.

[These stands were described in Chapter II.]

Now cover the top of the two stands and the plank, each with a piece of pink or light blue silk.

Then arrange as nicely and as symmetrically as you can some tooth brushes on the silk—about ten on each stand and twenty-four or thirty on the plank.

On the three-shelved stand arrange the tooth powder that you are pushing, and that you propose to push as long as you are in business.

One Preparation at a Time.

Remember, only one preparation on all three shelves.

Now prepare four placards, about $6\frac{1}{2} \times 10$ inches, with the following inscription:

1. We will replace any tooth brush we sell if it proves defective in two months.

2. We have small tooth brushes, large and medium brushes, some with soft bristles, others with hard bristles.

3. Our tooth powder cleans and polishes teeth perfectly. Price 25c.

4. You never bought so good a brush for 25c as we are selling.

Place these placards in their proper position, and your display is finished.

Your knowledge of tooth brushes, or any brush containing bristles, is of great assistance to you in the sale of them.

By assisting tooth brush buyers with suggestions as to the care of brushes, you create that "good-will" that people have for good, honest merchants.

This class of merchants are a magnet for their customers and people trade there because—well, as one lady puts it, "just because I can't help it!"

Tooth Brush Pointers.

Some tooth brush pointers that will be useful to your customers are these:

If any bristles stick out, cut them off, don't tear them out, otherwise you loosen the knot, and still more will come out.

Loose bristles are found in most brushes, on account of the wire that forms the knot having been drawn too tight.

Tap a brush after using it, to shake out the water and put it away fairly dry, otherwise the bristles may perish.

Do not keep it closely shut up in any receptacle, or it will smell offensively, and may become discolored.

A tooth brush will wear out faster with some people than with others, because teeth with sharp edges cut bristles, and teeth with irregular spaces will catch some bristles and pull them out.

Most people are liable to select too soft a brush, saying that a hard one makes their gums bleed.

This is all wrong, for bleeding gums show that they are too flabby and not healthy.

By constant use of a hard brush this bleeding will eventually cease and the gums become firm.

Firm gums are tooth insurance.

An Exception to a Rule.

Window advertising of tooth brushes and tooth powder seems to be one of the very few exceptions where one article can be advertised with another with profit.

One seems to "suggest" the other, and makes the double advertising possible, a fact that should also be remembered in making a sale.

When a customer asks for a tooth brush, ask if a tooth powder also is desired—and vice versa.

What outside advertising by means of a well gotten up circular is able to do, the following story will tell:

Otto J. Hartwig, a hustling Chicago representative of the N. A. R. D., has sent out 5,000 circulars each winter for the past ten years.

About 1,700 are sent out by messenger at one time, and three times every season.

Hartwig's Lung Balsam A Reliable Remedy for All Bronchial and Pulmonary Complaints

For Irritating Coughs, Tickling in the Throat, Sore Throat, etc., there is no Remedy Equal to it for giving Quick Relief. Cases of acute, stubborn coughs which have defied the effects of many so-called cough remedies have been cured through the use of this medicine. It is remarkably successful in curing

COLDS, COUGHS, CROUP, ASTHMA, PLEURISY, INFLUENZA,
DIPHTHERIA, BRONCHITIS, PNEUMONIA, HOARSENESS,
SORE THROAT, CONSUMPTION, PAIN IN THE CHEST, WHOOPING COUGH,
LOSS OF VOICE, TONSILLITIS, ETC., ETC.



WESTERN AND MILWAUKEE AVES

Origin of Hartwig's Lung Balsam

When the epidemic, LaGrippe, made its appearance in 1891-2 it was almost invariably followed by a cough, which was very obstinate and which often developed into Bronchitis, Consumption and other serious diseases. The old remedies failed to give any relief. We began to experiment with cough remedies and finally compounded the celebrated Hartwig's Lung Balsam. It cured like magic. The people that were relieved told their friends, they told others so now instead of making a few bottles at a time, we make a thousand.

Sold by all Druggists
Price, 25c. and 50c.
A Bottle.

The brilliant results which follow the use of this remedy demonstrates its superiority over all other cough mixtures, especially the old-fashioned syrups containing squills, ipecac and opium, which stupefy and nauseate, and impair the digestive organs, leaving behind many harmful results. While it gives prompt relief, Hartwig's Lung Balsam has also great tonic effect on the system.

It builds up and strengthens the lungs, and exerts a constitutional influence which speedily banishes disease and restores the patient to perfect health.

It is perfectly harmless, and commands itself as a remedy that infants and most delicate adults can take without the slightest risk.

A Great Cough Syrup Business.

The result of this campaign is that now Mr. Hartwig sells about 180 gallons of cough syrup per year.

The circular is no cheap affair, being printed on good enameled paper, black and red ink, and represents a first class printer's job.

It is 6¼x9 inches, and has four pages.

The front page is shown herewith, and states the superiority of this preparation over the patented article, and also the origin of it.

The second page is a further exposition of what "Hartwig's Lung Balsam" is and is good reading.

The third page contains 6 paragraphs on Pure Drugs, Prescriptions, Telephone, etc., and the last page has a good perfume ad. There is considerable white space on the second, third and fourth pages, and with the picture on the front page, it presents a remarkably fine appearance.

Start Circularizing, Then Keep it Up.

Such a large sale naturally represents more than a local demand, created entirely by a good article and by thorough circular work.

But successful as this circular advertising has been, Mr. Hartwig is of the opinion that his first attempts at advertising would have been productive of more good if he had used type-written letters.

He cautions druggists not to expect too much from first attempts, but to "keep it up."

CHAPTER V.

It is good business policy to have modern show cases. They sell goods.

The modern 3-shelf floor case is an important factor in the success of a retail druggist. It sells goods because it works every minute that a customer is in the store.

Probably no side line, well arranged and displayed in a modern show case, is so profitable as rubber goods.

The demand for this class of merchandise is good, is constantly increasing and an 8-foot show case, with four

display surfaces, is none too large even in small village stores.

Display All Kinds.

You must display one or more pieces of every kind of these goods that you have, otherwise you lose sales.

For instance, a lady wants a certain kind of syringe. If she sees it, she may simply point to it and say, "I would like this syringe." If she did not see it, she may be too modest to ask for it, having a horror of probably answering an embarrassing question.

Do not buy cheap rubber goods, or more properly speaking, do not sell them if it can be avoided.

You are almost compelled to have them, because some people want a good (?) fountain syringe for 40c.

Cheap Goods Sell Better Ones.

Having these cheap goods should really be one of your best arguments in selling better ones. The cheap goods you cannot guarantee and a comparison always helps to bring out the strong points of the better grade goods.

Examine carefully every atomizer, syringe, hot water bottle, etc., upon receipt, and have an understanding with your jobber that every piece found defective must be exchanged for a good article, either before or after its purchase by the user.

It is only by such an arrangement that you are able to guarantee these articles to your customers, for defective goods are sure to find their way into your stock.

Arranging the Display.

On the bottom of your show case place your fountain syringes, white, maroon and black and enameled metal fountain syringes.

On the next shelf place hot water bottles, and if space is left, put in bulb syringes, spray syringes, or other large goods.

On the second shelf from the top place the atomizers, hard rubber syringes, ice bags, catheters, breast pumps, a few nursing bottles, rubber brushes, etc.

Use the top shelf for the smaller

wares — nipples, medicine droppers, breast shields, vaccination shields, glass syringes, etc.

Make your display pleasing to the eye and keep it so.

Keep rubber goods out of show windows where the sun might shine on them, and keep the floor case as far from the source of heat in winter as possible. Heat spoils rubber goods, both hard and soft.

Be as careful of your rubber goods as you are of your candy or perfumes, and you will have no old stock.

Soft rubber goods should lay flat, never folded.

The foregoing facts on care of rubber goods, judiciously sandwiched into your other arguments, will often assist in sales and in clinching a bargain.

Don't Neglect Show Cards.

Have the following show cards, $2\frac{1}{2} \times 6$ inches, put in the proper places in the case:

1. We will replace any article that proves defective.
2. This fountain syringe is a bargain at \$1.25.
3. Every nipple perfect in this lot, 5c each.
4. These ice bags will always be dry on the outside, 75c.
5. Use this atomizer instead of gargling—results are more prompt, 50c.
6. A warm thing for cold feet—put in your bed, \$1.50.

(This can be placed on a flannel or cotton covered hot water bottle.)

In making show cards, as well as other printed advertising, do not use such words as Don't, None, No, Nothing, etc., if it can be avoided.

Be positive, not negative. A positive statement attracts, a negative one repels.

For instance, in No. 3 above, if you say "No bad nipples in this lot," it suggests **at once** to your customer to be careful, and he presupposes that other lots were bad, and that some of these bad ones may be in this lot.

Say what the article is—then quit.

The Druggists' Own Paper.

J. L. Ormsbee & Co., of Springfield, Mo., are firm believers in the Druggist's Own Paper for outside advertising, and we quote Mr. Ormsbee as follows: "In my mind nothing equals



Perfect Prescription Service by Competent Prescriptionists

'The Druggists' Own Paper,' as a means of increasing one's business.

"I have been in business here 16 years and at various times have tried different methods to increase my sales with not much success.

"But when I started 'The Druggists' Own Paper' and sent my boy from house to house and saw that it was well distributed, my business soon increased.

"The sales increased over \$1,000 in one year, and this is a big item for any small business."

This "Druggists' Own Paper" is a good sized (7½x10 inches), eight-page publication, full of readable short stories, up-to-date jokes, puzzles, etc.

Besides this reading matter, there is a liberal amount of advertising space which you fill in yourself.

The contents of the paper is such that it will be a credit to your store.

You name the paper yourself and hence it is your individual property, the name appearing on the front page.

The front page of one of these papers is illustrated in this chapter.

The paper is sent out monthly and 500 copies cost from \$5.00 to \$6.00.

The papers interest children as well as grown-up people, and are anxiously awaited after a few issues have been distributed.

That they have a faculty of impressing people like no other advertising does, seems to be the opinion of all who use them.

CHAPTER VI.

As every druggist sells perfumes and as an extra effort is generally made during the Christmas holidays to sell more of them, we will fix up a neat and pretty window for our holiday display; the illustration here given is simply to show the general outline.

A Garden Window.

The groundwork of your window must be made to represent a garden, as true to nature as you can possibly make it.

A very effective plan is to have a background of very pale green or blue cloth to a height of at least three feet from the bottom of the window.

The floor of the window itself may be either a rich green, black or brown cloth, and at various places underneath the cloth place small pill boxes, to raise the cloth, making a rough appearance.

Now place in the window well towards each side, two blooming potted plants, the choicest you can procure.

Near the middle of the window place two or three bouquets in glasses changing the water daily and adding a little salt to the water, to keep them fresh.

On your background arrange some natural vines or leaves. If these are not readily procured, you can purchase some artificial ones from some

wholesale stationery or millinery house.

Make your "garden" as real and as pretty as possible and then place your two stands and the plank described in a previous chapter in suitable positions.

Stocking the Window.

Now place one full 8-oz. bottle of perfume or a dummy duplicate on each one of the stands, and four or five boxes of the $\frac{1}{2}$ -oz., 1-oz., or 2-oz. sizes on the plank.

Don't put your entire stock of holiday odors in the window. The above six pieces are enough. Then put in the following four placards:

1. Apple Blossom—the true flower odor—from genuine apple blossoms. Made in California.
2. The most delicate Apple Blossom odor made, 50c per ounce.
3. Every one of our odors is genuine and fresh.
4. Come in and sample our perfumes.

If you will in all your attempts at window display bear in mind that the article displayed must be set off, or emphasized by its origin or its effects, whenever possible, you will soon make your window play handsomely.



The use of perfumes is very general among all classes and they should be pushed energetically, as the profits are liberal, and your store should have a reputation for handling a really choice line of odors.

The fifty cents per ounce kind is the most popular, and if your line comprises the standard odors of a reliable firm, with one or two of the leading specialties from other firms, you will be in position to do a good perfume business. You want the best trade, so why not fish for it?

You must understand the nature of perfumes, that you may properly keep and handle them. Never interchange stoppers, and keep them out of the strong light of the sun.

A fine delicate perfume is as easy to spoil as it is difficult to make, so treat your perfumes as fine, dainty goods, worthy of the greatest care.

Clean your perfume graduate after each sale of bulk perfume, for a neglect of this precaution is what causes your customers to complain that they are not getting the same perfume which they sampled and that the odor is different at home than at the store.

If the graduate is not cleaned, the evaporation leaves a small residue of oily matter, which being exposed to the air, becomes really rank and foul smelling, being oxidized or resinified; and when the graduate is used again, this foul smell is taken up by the perfume which your customer gets.

An "Exclusive Agency" Proposition.

Every druggist should have at least one special odor of his own make, give it a distinctive name, and push it.

But it must be an odor that has merit and the price from 50c to 75c per ounce.

You then have an "exclusive agency," which places you out of the reach of competition, for no one else can get it.

The proper way to sample your "exclusive agency" perfume or any other kind that you are making a special effort on, is to use an atomizer, and spray some on every customer that enters your store, making proper comments or excuses in each case.

In this manner your special odor will soon be your leading seller, if you have taken care to produce something really good.

An Ad Criticised.

The following copy of a newspaper ad is from a leading druggist in Washington, D. C., occupying one-sixth page of the Washington Herald.

The ad. is strictly a cut-price ad., and contains 125 names of articles with prices. It is in the nature of the department store ads. and the store does a "wholesale and retail" business.

It contains such items as 500,000 Post Cards at 1c; Wood Alcohol, 8c pint; 25c nail files, 12c; \$1 Listerine, 61c; 25c 1 lb. cans Phosphate Soda, 9c; 25c box Colgate's tooth powder with 10c Soap, 15c; 5c Owl cigar, 7 for 25; etc. The ad. is headed—Cut Prices Today and Saturday. This druggist says "We find when we have something special to offer, we make it special and flash it in our best newspaper."

"Our experience is—don't hesitate to sell cheap and you will do business."

A Good Feature.

One good feature of the ad. is that prescriptions are not offered at a cut price.

We cannot understand the object of selling 125 articles at such a cut price, many being offered at cost, unless it be that this druggist, being a wholesaler—or, at least, a large retail buyer—can secure goods far below what an ordinary retailer can purchase them for.

We honestly believe that ads. of this kind are "money losers" and while they may in certain instances be of permanent value in building up a business, this would be the exception to the rule.

However they serve the purpose of trade demoralizers perfectly and make the work of such organizations as the N. A. R. D., the A. Ph. A., and others, who labor for the pharmacist's betterment, doubly hard.

Talk Quality and Service.

If the same amount of energy, time and money were spent upon ads. talking quality, service and such fair

prices as most druggists sell for or can meet, the actual cash profit would be fully as great and it would give pharmacy a better standing with the public in general.

CHAPTER VII.

Does it pay to sell cigars? Certainly, anything can be made to pay well that is in popular demand.

The trouble with most druggists is, however, that they have too many brands, generally too many of a kind and, worst of all, they cater to only a part of the smoking trade.

As one form of using tobacco is morally no worse than another, why not cater to all users of the weed, instead of only the cigar smoker?

You are after business, money, profits, when you sell merchandise and must not choose your customers—one person's money is as good as another's, whether he buys cigars, smoking tobacco, or chewing tobacco.

Your cigar case is generally given the place of honor in the store, up in front near the door, and while this is really the proper place for it, there are times when it may be placed differently.

For instance, in residence neighborhoods, where gentlemen are wont to stand near the door and smoke, ladies who are very frequent visitors may feel offended at being obliged to crowd by through a cloud of smoke. If you are so situated, you may have lost some lady customers on account of it and it would be policy to change the location of your cigar case.

As knowledge of your wares often leads to unexpected sales and makes you "solid" with customers, it will pay to study up the subject of tobacco in the Dispensatory, and also get some information from a well informed salesman or manufacturer.

Look to your interest, not the agents'—your interest does not lay in buying 1,000 cigars of one kind, when the only inducement is "5 per cent off," unless the cigar is such a seller that you can dispose of 1,000 in 6 months' time or less.

A Sensible Proposition.

What you should do is to go to some manufacturer and have him make for you two or three special brands—not, however, with your name on the box.

Tell him just what you want,—the best cigar he can produce for \$27, which you can sell 6 for 25c; one at \$30 or \$32, to sell at 5c straight, and one at \$50, that you can sell at 3 for 25c.

Tell him you want the cigars regularly as you intend pushing them, that you will pay spot cash for them on delivery, and that you insist upon them being always made the same.

Set your price and if he cannot meet it, go to another who will, even if you must go outside of your own city; be also specific in your ordering as to color, size and shape.

You must be sure that you get good tobacco, then "your" cigars will bear the same relation to the other kind, as your own family medicines bear to patent medicines, which means "more profit to you and better value to your customers."

How to Handle Cigars.

Cigars must be kept moist at all times and the more air-tight your case is, the easier this becomes. Should it happen accidentally that your cigars have become very dry from neglect, put a vessel with steaming hot water in the case over night.

The addition of a little rum, about $\frac{1}{2}$ oz., to the pint of water, has a tendency to make the flavor of tobacco more agreeable and to keep out that musty smell so often found in cigar cases.

Two placards should always find place in your cigar case, as:

1. The best value for 5c, is our free smoker, La Tampa.
2. Most of our 10c cigar buyers buy the La Rose.

Cigar customers often are very cranky and unreasonable, and it is entirely out of place for you to argue with him.

If a certain cigar is wanted, hand it out and keep your knowledge to your-

self, as by so doing you keep your friends.

The principal thing about cigars is to buy good ones and keep them right.

In a wall case with glass doors, just back of your cigar case, keep a well assorted stock of smoking and chewing tobacco. Pipes are not so important, but are desirable stock.

When putting in a new side line or a new department, however, six things must be taken into consideration:

1. Can I buy it right? 2. Can I sell it at a satisfactory profit? 3. Can I keep it right, to prevent waste and damage? 4. Can I display it properly? 5. Will it detract from the sale or profit from other lines that I already

THE M. W. HYDE DRUG STORE

EVERYTHING
IN DRUGS.....

PRESCRIPTIONS CAREFULLY
::: COMPOUNDED :::

....Kodaks and Kodak Supplies....

NOTHING BUT
FIRST CLASS
DRUGS USED...
Bicycle Delivery.

M. W. HYDE DRUG STORE.

'Phone 39.
Ellisville, - - Mississippi.

have? 6. Do I understand it thoroughly?

Herewith is reproduced a newspaper ad. of Hyde's Drug Store, Ellisville, Miss., which occupies a $4\frac{1}{4} \times 6$ in. space in "The New South-News."

We are glad of the opportunity given us by Mr. Hyde to criticise this ad., not alone for his benefit, but for the benefit of hundreds of druggists who advertise in exactly the same way.

In the first place this ad. will sell no goods because none are advertised, and again, it only has the value of a business card in the paper, for which purpose it is too large and too expensive.

Your name in a newspaper ad. is not **the** important thing, therefore it should appear in small type and only once. You should advertise only one thing at a time and give prices in a newspaper ad, by the same token that you only advertise one thing in your show window—in fact, your window display and your newspaper ad. should advertise the same article for cumulative effect.

In a town like Ellisville, with a population of 3,000, and 3,000 more in the

CHAPTER VIII.

Appropriate window displays for Christmas-time include Perfumery, Cigars, Stationery, Cameras, Candy and also if your stock includes them, Games, Toys, Bric-a-brac, Statuary, Leather Goods, Manicure Instruments, Cutlery, Musical Goods, etc.

A stationery window always presents a neat appearance if a small amount of care is taken and is a very effective agent in making sales.

Good Stationery Makes Customers.

Your window being empty and cleaned, procure a number of boxes about twelve inches high and with the aid of several short boards, make a semi-circular shelf well towards the front of the window.

Back of this make another shelf at least two feet high and then cover the whole shelving and including the bottom of the window with some light colored cheese-cloth.

It is well to remember that the richer and finer the cloth coverings are in a window the more beautiful will be the effect.

Silk will prove the best investment for the purpose if you will care for it properly, keep it free from dust and moisture, as it will outlast many purchases of cheese-cloth.

Immediately in front of the first shelf and also on both shelves, place your box stationery—fancy boxes, open and closed, and your other regular stock.

Do not crowd the shelves, leave room between boxes, for it looks better, the same as white space improves the looks of your newspaper and circular ads.

Two stacks of your best 25c sellers, of about 15 boxes each, either arranged spirally or cross ways will add much to the display.

Now in the open space in front of the paper and closer to the window, display your fountain pens, fancy ink-wells, or other appropriate articles.

CHRISTMAS

for that boy of yours—

A Hyde Camera

A handsomely finished camera, in various sizes, at easy prices. A delightful present that begins its mission the first thing Christmas morning. A useful and instructive present, and very simple to operate. Your boy will be tickled.

WE HAVE SIX SIZES:

\$2; \$3.50, \$5; \$8; \$10; \$15.

We also keep all the necessary supplies for these cameras.

M. W. HYDE DRUG STORE

Ellisville PHONE 39 Mississippi

farming community of a six-mile radius, this is an ideal way of advertising and results are sure to appear.

For instance, you are making a Christmas display of Kodaks in one of your windows, then insert the ad. as revised, in your newspaper for the same week, and ask your printer to use "art" in setting it up.

By doing this 52 times per year in a weekly newspaper with 52 different ads, you will accomplish wonderful results. The important thing is to say something definite in as few words as possible, put on the price and then stop.

Price Tickets and Placards Necessary.

Put a small price ticket on every article displayed, about 1x2 inches, and make the price the regular retail price. However, for a Christmas occasion you might shade the price 10 or 15 per cent.

But do not get the idea that because you advertise, you must sell cheap, or close to the wholesale price. This is entirely unnecessary; talk quality.

Prepare four nice, neat show cards and place them in their proper position:

1.—These are quality goods that make acceptable Christmas gifts.

2.—The best box stationery manufactured, but note the prices.

3.—Everything in this window is high grade and first-class.

4.—What is more acceptable than a reliable fountain pen?

Protect the display as much as possible from dust, that it may look clean as long as it is for show.

Any little extra decoration, appropriate to the festive Christmas time, as ribbons, leaves, vines, mistletoe, etc., will add to the effectiveness.

Stationery is a Revenue Producer.

When one considers the vast amount of money spent in stationery and stationery sundries, and then surveys his small, ill-assorted and stingy stock, it must occur to you that you are not taking advantage of your opportunities.

It is a side line that appeals to almost anybody, and it moves very rapidly without much pushing if properly displayed.

Your stock should comprise crepe and tissue paper, school supplies, plain and fancy shelf paper, magazines, tablets, note and composition books, etc.

Keep the stock up-to-date and well assorted, for the demand is constant. Let your customer know that you are headquarters for the various things you handle, and they will soon cease bothering about going elsewhere for their purchases.

Aggressive Fountain Pen Selling.

If you have an extra good fountain pen at \$1.00 or \$1.50, put one in the top coat pocket of your adult friends and customers whom you can trust, and tell them "that it is such a dandy piece of usefulness that no one can get along without it after once using it."

You will guarantee it to him and if he doesn't like it after a week or two of trial, you will take it back very cheerfully.

On the other hand, if he does like it, he can pay for it, and this he will be very glad to do.

This may seem very aggressive, and is; but if you present the proper front and are courteous, it will sell you dozens of fountain pens.

Chas. H. Sprague, proprietor of the Benson Pharmacy, in Benson, Neb., makes the following statements regarding his advertising:

"I am in a suburb of Omaha, population about 600 and consisting of day laborers and retired farmers.

"In the summer the wealthy class from the city come to their summer homes and many farmers are in town every day.

"We are 30 minutes ride from Omaha, with a 10-minute street car service, and although Omaha is full of cutters, our town gets 75 per cent of its normal trade.


Guarantees Everything.

"I use my windows, our paper, premiums, have signs on fences in the main country roads for 20 miles around and some article with my name on it is found in every home in this part of the country.

"I get my name and business before the people and, as it pays me well, I keep it there.

"I guarantee absolutely everything I sell, give a truthful answer to every question asked me and try to be civil to every one."

We are reproducing one of Mr. Sprague's newspapers ads herewith, which appeared across the entire top of the page, 4½x14 inches. The ad. is

SUNDAY Rainier Snow	Sprague's Benson Pharmacy East Half Bank Building <hr/> IT IS BETTER TO BE SAFE THAN SORRY <hr/> Our system of handling prescriptions is the latest and safest and we use nothing but chemically pure drugs. Our prices are the lowest. <hr/> Phone Benson 124 CHAS. H. SPRAGUE.	 <small>Spokane, Idaho, Jan. 1, 1935. The following is a list of the names of the persons who have been named as winners of the prize of \$100.00 in the contest for the year 1934. The names are listed in the order in which they were drawn. The names of the winners who were not in the city at the time of the drawing will be notified by mail. The names of the winners who were in the city at the time of the drawing will be notified by mail. The names of the winners who were not in the city at the time of the drawing will be notified by mail. The names of the winners who were in the city at the time of the drawing will be notified by mail. The names of the winners who were not in the city at the time of the drawing will be notified by mail. The names of the winners who were in the city at the time of the drawing will be notified by mail.</small>
MONDAY Clear		
TUESDAY Fair		
WEDNESDAY Fair		
THURSDAY Warmer		
FRIDAY Last of Moon		
SATURDAY Local Rain		

Use Sprague's Headache Tablets

good and the two cut offs on each side of the main ad. just tend to keep it in the proper "one thing at a time" style. Still, in our judgment, it would be a greater revenue producer if it were divided in two ads., each half the size of the original, and each speaking for only one thing.

We would suggest, however, that the printer be induced to use a more modern style of type, as this would improve the looks considerably and add to its effectiveness.

CHAPTER IX.

Any druggist who can possibly find room for a six or eight foot floor case for candy should do so.

We are a nation of people that spend as a rule more for the luxuries of life than for the actual necessities, in fact, we like to enjoy life.

We have our perfumes, cigars, soda water, delicacies, without mentioning traveling expenses, theater and concert expenses, etc.

Candy is a luxury, universal in its demand, and most people will buy it if temptingly displayed.

Displaying Candy.

The display naturally must be tempting, otherwise numerous sales will never be made, and the profit per sale must be such as not to be prohibitive to a purchase.

Your case and everything in it, both candy and trays, must be scrupulously clean, neat and appetizing, for no half-way measures are permissible here.

The trays must be kept filled, as nothing looks so bad as when several

of your trays are nearly empty and the crumbs and grains show on the bottom.

It is a mistake to sell box candy alone, for many customers will not purchase box candy, and besides you must have as many kinds as possible, that your display may be tempting.

A little judgment on your part and an intelligent understanding with your candy house, will always result in a good selling line.

Candies must be kept out of the sun and as far away from your stove or radiators as possible.

If you will keep everything extra clean and your assortment is a good one, few will pass the case by without saying, "let me have ten cents' worth of these," or "five cents' worth of those," — a genuine silent salesman.

In regard to penny sales, you must be governed entirely by your location, although any sale under 5c is more of a detriment, as a rule, than otherwise.

Candy is a Trade-Winner.

The bottom of your case is used for box candy, avoiding crowding as much as possible, and the other shelves contain the glass trays with bulk candy, various chocolates, peanut bars, caramels, etc.

On top of the case place your jars and bottles with fruit-tablets, lozenges, licorice pellets, etc.

Four or five neat small placards are appropriate for the inside of the case:

1. These dipped caramels are the nicest possible, only .35c per pound.

2. A pound box of chocolate creams is good company for your theater evening, only 50c.

3. Our candy is all clean, fresh and pure—and you can afford it.

4. The best Peppermints we ever had, 25c a pound.

5. Most everybody buys their candy here.

Buy soft candies in small quantities, that your stock may always be fresh. If some of your box candy must be stored outside of the case, wrap it in transparent tissue paper that it may not become soiled or fly-specked.

A Unique, Effective Scheme.

Alfred J. Shilling, a prominent South Side Chicago druggist and an active

41½x10¾ inches, that advertises several seasonable specialties each month.

This calendar, a reproduction of which appears herewith, is accompanied by a letter, also monthly, and the way this combined scheme has built up the sale of Mr. Shilling's specialties and in consequence ruined the sale of patent medicines and patent toilet preparations, is almost beyond belief.

Generally also samples of these specialties, as toilet cream, pills, etc., are sent with the letter and calendar.

The letter is in Mr. Shilling's own handwriting, and is duplicated by means of a hektograph.

The December letter is as follows:

Dear Friend: Being the close of a delightful and prosperous year, I wish you A Merry Christmas and A Happy New Year, and may you have many, many more. I have importuned you many times for your friendship and trade. I thank you very kindly for what you have given me and hope to receive your future favors. I shall continue to cater to your smallest needs in the drug and sundry line, guaranteeing the best of treatment and satisfaction.

I have an exquisite line of perfumes and toilet articles, all the popular goods and at the right prices. Call in and see if I am right. I have many useful and beautiful articles suitable as gifts, that are worthy your attention. I want to please you—I need you and must have your trade. I am respectfully,

ALF. J. SHILLING.

P. S.—How did you like "Marquise Cream-Lana?"

CHAPTER X.

We have repeatedly dwelt upon inside advertising by means of properly arranged show cases and nice window displays.

Nothing can excel these two methods of advertising, but other effective methods can be worked at the same time.

To show that display helps sales, in a manner that everyone can see, just try the following scheme:

Selling Peroxide Hydrogen.

Put up six, nine or a dozen bottles of Peroxide of Hydrogen, in a 5-oz. size, square prescription bottle preferred, and put on your regular shop label, "Peroxide of Hydrogen."

MERRY CHRISTMAS AND HAPPY NEW YEAR

ALF. J. SHILLING
DRUGGIST
167 AND COTTAGE GROVE AVE

Syrup, Loz, Jar and Wild Cherry for Coughs and Colds
Bronchial Remedies for Sore Throats and Hoarseness
Hydro-Bromate, Quinine-Laxative for Colds and Grippe

WE SERVE THE BEST AT OUR SODA FOUNTAIN

1908		DECEMBER							1909	
SUN	MON	TUE	WED	THU	FRI	SAT				
		1	2	3	4	5				
6	7	8	9	10	11	12				
13	14	15	16	17	18	19				
20	21	22	23	24	25	26				
27	28	29	30	31						

PLEASE PRESERVE THIS A GIFTED DESIGN TO FOLLOW EACH MONTH

N. A. R. D. worker, has a unique way of advertising. He sends out every month a calendar for the month following, on very heavy white bristol board,

Now wrap in your regular wrapping paper, tie up well with twine and again label, and mark 25c under the label on the wrapper.

The twine should be brought around all four sides of the bottle and wrapped twice around the neck.

This makes nice appearing packages. Place them on your show case where they can be seen and you will find they will "sell themselves."

It will also be the means of converting many ten and fifteen cent sales of this popular article into 25c sales. As Peroxide of Hydrogen, U. S. P. quality, can be purchased for \$1.00 per gallon, your profit is well worth this effort.

Reducing Your Stock.

Another way to prove the above contention that display sells goods is to gather all your thermometers together, brush them up and hang them on a board prepared for this purpose.

Procure a smooth board of about half an inch thickness, and a little wider than the length of your longest thermometer; the length of the board depending upon the number of instruments you have for sale.

Paint the board white, and on the bottom paint the following, in black paint, the letters being about one inch high:

Reliable and Accurate, Every Day in the Year.

Very close to the top of the board insert screws on which the thermometers will be hung, and directly beneath these hooks put the price of each individual thermometer. Then place this display where it is out of the way but visible. A suitable place may be found in one of the windows.

A Trade Producer.

Another good, trade-drawing device is the following: On a good bristol-board card, about 3½x6 inches, print a list of some of your meritorious sellers and have the cards distributed to every home in your neighborhood. The price of these cards is about \$2.50 per thousand. The appearance of these cards is shown herewith:

A FEW MERITORIOUS ARTICLES AT JONES' DRUG STORE.

Jones' Pure Vanilla Extract, 2 oz. bottle	25c
Our very best 2-qt. fountain syringe.....	\$1.50
Jones' Spring Tonic, a reliable medicine.....	25c
Genuine Japan Tooth Brushes.....	25c
The best Sponge for the Baby.....	20c
Jones' Condition Powders, 1-lb. pkgs.....	25c
The new perfume, Chrysalis, per oz.....	40c
John Brown, our best nickel cigar, per box of 50.....	\$2.00
Jones' Reliable Headache Cure.....	25c
Mineral Water, Pluto, quarts.....	35c
Genuine full weight Seidlitz Powders, per box	25c
Pure Fresh Mixed Cream Candy, per lb.....	20c
Oro, the best soap for hands and face.....	10c
Roxenburg, the latest box paper.....	25c
Jones' Rose Cream, the best made.....	25c
A good Reliable Thermometer, well mounted	25c

JONES' DRUG STORE

Blankville, Ohio

Telephone 131

The A B C of Advertising.

These three schemes will cost you only a little time and the expenditure of about three dollars, and can be considered the A B C of advertising.

They will more than double your sales and profits on Peroxide of Hydrogen, they will sell your thermometers where otherwise you would have sold none, and the calls for some of your "meritorious articles" will come from customers that will be a surprise to you.

It will in fact be an ideal object lesson to you that publicity puts money in your pocket.

Attractive Advertising.

Henry Curtis, of Camden, N. J., has a decidedly unique way of advertising, consisting of a beautifully colored envelope containing a fragrant sachet powder, which closes like the two covers of a book.

Inside are four pages of reading matter on fine enameled paper, including a few short telling ads., a photograph of the store and a calendar for the year.

The pages are fastened to the envelope with silk cord and the whole presents a refined and attractive appearance. Mr. Curtis, in describing his plans, writes;

"I prepare my list of lady patrons early in the fall, (there are no men in this deal except myself), and deliver these envelopes by messenger a day or two before Christmas.

"At that time the ladies, especially the younger ones, do not mind answering the door bell, and I am pretty sure they will reach the proper person.

"This scheme has produced good results and as my customers each year remind me early to save them one of these souvenirs, (as they may properly be called), I am pretty sure to keep it up from year to year."

CHAPTER XI.

You have often heard the expression, "His show windows look like a regular junk shop. We have endeavored in these chapters on advertising to present practical facts in such a way that pharmacists will realize the importance of following the teachings contained therein.

However, in doing this, one important thing is overlooked or forgotten. While windows and show cases have been fixed up in proper shape for pleasing effects and for selling goods, the rest of the store still has a resemblance to the proverbial "junk shop."

This only goes to show that advertising is an art and cannot be learned in a few lessons; it must be studied from various viewpoints that "the eternal fitness of things" may be present.

After Windows and Show Cases, What?

So when you have the contents of your show cases in presentable shape, remove from the top of the cases all the old cards and easels that have become soiled and fly specked with age.

These cards and easels containing headache powders, corn cures, finger cots, manicure instruments, nipples and innumerable other little sundry items are perfectly proper for a week or two, but after that they should find other places inside the show cases and removed from the cards.

Their places can then be given to other cards or to other suitable displays, the idea being the same as that which governs your window display changes. Keep changing things about, for the simple fact of changing the top contents of show cases from one case to another often produces many sales.

Many customers have a habit of always standing at one particular show case, no matter how often they visit your store or whatever their purchase may be.

This "rotation of sundries," etc., will bring something new to their field of vision and often results in a purchase.

The tops of your show cases is the proper place for your own preparations and such articles as Peroxide of Hydrogen, Flavoring Extracts, Aqua Ammonia, Witch Hazel, Bay Rum, Cod Liver Oil, etc.

The 5c and 10c Sales Nuisance.

One of the most effective ways to reduce to a minimum the 5c and 10c calls for the more frequently used household remedies is to put them up somewhat as follows: Fill five or six 8-oz., short blake bottles with Castor Oil, cover the cork with a pleated bottle cap and sell them for 25c each. Everyone buying Castor Oil will not purchase one, to be sure, but the number of 25c sales of Castor Oil is only limited by your desire to get away from the penny-school-store-and-candy-store class of merchant.

The public eventually are with you because it can purchase cheaper; it's simply your privilege to consider yourself a real merchant and to respect yourself as such.

Where There is a Will, There is a Way.

It is just as easy to educate people to buy 25c worth of this class of goods as it was to educate them to ask for a 25c or a 50c bottle of Cough Syrup, or a 25c-size of Toilet Cream.

Other household articles thus displayed may be: 5 oz. Peroxide Hydrogen, 25c; 16 oz. Witch Hazel, 25c; 16 oz. Cod Liver Oil, 50c; 8 oz. Bay Rum, 25c; 16 oz. Washing Fluid, 25c. (This

latter is made by dissolving 8 pounds of lye and $\frac{1}{2}$ lb. Borax in enough water to make 7 pints and adding 1 pint of ammonia water; let stand a few days and filter; as the solution becomes very hot, it is best prepared in a porcelain casserole or iron kettle; one tablespoonful to a boiler full of clothes; it's a wonderful labor-saving cleanser and a good seller); 2 oz. Vanilla Extract, 25c; etc. This list can be added to as your demand may warrant and may include genuine Hoffman's Drops, Essence of Peppermint, Tincture of Ginger, Antiseptic Solutions, etc.

By having three or four times the usual amount of these household remedies in their homes, your customers are also very apt to use them more freely and in this manner you may eventually make as many 25c sales as you now make 5c and 10c sales.

The Bottles To Use.

While it may seem to many pharmacists that here is a good chance to get rid of many 4 oz., 8 oz., and 16 oz. empty fluid extract bottles, we would caution against this practice. It looks cheap, is cheap, and acts as a damper on the sale of this class of goods.

Use nothing but clean, short blake prescription bottles, excepting only for those articles as are affected by the light, viz., Peroxide Hydrogen, Essence Peppermint, etc.

Those fluid extract bottles can be used for necessary 5c and 10c sales of such articles as benzine, oils, alcohol, etc. Take advantage of **all** the chances that you have to make **money** by being courteous and polite, by propaganda work, and in a few years you will be prosperous and able to enjoy life better than you now do.

Do not be afraid of what the other fellow is going to do, your brother competitor, but do things yourself your own way and make things count when you do work.

The Drug Store Paper.

The Dorrance Drug Co., Coldwater, Mich., make use of that effective sales agent, the eight-page drug store paper, the good points of which

were once before pointed out in these chapters.

The first page is devoted to nine short paragraphs on "Why trade in Coldwater," "White Pine Cough Syrup," "Tasteless Castor Oil," "Baby Foods," etc.

The second page, "Christmas Perfumes," talks quality and high-grade perfumes with prices and is talk that sells goods. Their talk is "booster" talk, not "knocker" talk. They do not say what they do not have or run down other goods, but simply boost what they are anxious to sell, and this is effective.

The third page, "A Kodak for Christmas," tells why the boy's or girl's Christmas present shall be a Kodak and if read by many parent's of Coldwater children, will doubtless result in many Kodak "fiends" for that southern Michigan city.

The fourth, fifth and part of the sixth pages are devoted to "Remarks to the Point" and are devoted to the misguided members of soap clubs, etc., people who **think** they buy cheaper from Larkin, Crofts & Reed, etc., than they can in Coldwater.

It tells, in plain, unvarnished cold type how these soap houses are selling inferior goods at higher prices than the Dorrance Drug Co., and gives prices in parallel columns illustrating this fact, with 21 articles, as follows:

	Dorrance's Price.	Larkin's Price.
Tincture Arnica (4-oz. bottle)...	15c	25c
Spir. Camphor (4-oz. bottle)...	20c	30c
Castor Oil (4-oz. bottle).....	10c	25c

It tells how people must buy \$10 worth from Larkin in order to get the reduced (?) rates and the valuable premium, and how they can buy better goods at Dorrance's, when they are wanted and in any quantity, for much less money, buy their own premium and still be money ahead.

Pages 6 and 7 tell the truth about the misleading newspaper advertisements of such frauds as Kargon, Spirene, Oil of Pine, etc., and page

8 is a discourse on Patent Medicines, good and bad.

It is a Winner.

This paper is properly circulated and the results show heavily in dollars, well wishes and good will towards the Dorrance Drug Co., and is one of the most effective weapons for a pharmacist to use who wants to receive proper remuneration for his long hours of work.

CHAPTER XII.

We have several times in these articles used the phrase, "The eternal fitness of things," meaning that everything in and about your store room should harmonize.

When your show cases and windows are arranged and dressed as best lies in your power and are trade winners, don't you think it looks just a little out of place to have your tincture and salt mouth bottles on the tincture shelving look as if you could not afford to invest a few dollars in new labels.

Some labels are cracked, some chipped off, some are represented by a little wax left sticking where the label once held forth and some are replaced by paper labels.

Now this will not do; it looks bad and causes an air of carelessness and untidiness to prevail in the room, of which you should not be guilty.

Replacing Old Labels.

Replace all these old labels by new ones to match the original and you will see that the eternal fitness of things is beginning to assume definite shape in your store.

To continue along this line of work, you will notice that many of your tinctures, etc., show a precipitate that looks very bad in your customer's eye.

Such are possibly the tinctures of Nux Vomica, Gentian Compound, Arnica, Cinchona, etc., and these should be filtered to present a more respectable appearance to the public, and also that prescriptions containing them may look clear.

Old Friends.

On the other side of your room the patent medicine case also needs attention. Too many of the packages look old and dirty, and at times you feel rather ashamed to deliver a package to a customer because it looks as old as Noah's Ark.

There is no need of this, for new wrappers can be obtained for nearly all packages from the manufacturers; and for the sake of the looks of your store, it should be done.

A great part of this stock is "dead stock," and is a silent tribute to the selling abilities of the proprietary concerns and a forceful criticism of your talent as a buyer.

But the question that concerns you at the present time is not what you or they have been or were, but "what are you going to do about it now?"

Getting Rid of Dead Stock.

Four ways are open to you in getting rid of dead stock: First, trade it for something you **can** sell; second, keep it for old time's sake, if it is no eyesore and let it be a link connecting the past with the present; third, throw it away and get it out of your sight forever; you can then use your undivided efforts to build up real trade with your own preparations and with the physicians. The extra profit on this will in a short time balance your loss on the dead stock and, in the future, be careful that you get no more; fourth, and the most dangerous way, is to sell it and, unfortunately, this is the most common method pursued.

Jones drops in and says, "Mr. Druggist, my horse has stiff legs; what's good for it?" Mr. Druggist promptly produces a bottle of liniment, the last one, that no one has called for in years and pockets the full retail price.

Knowing Your Customers.

Now this liniment may have had some merit, at least so Jones thinks, and before the stiffness is all out of the horse's legs, he comes for another bottle of "that same stuff." Of course "you are out" and your troubles begin, unless you know Mr. Jones.

You must know your customers and diplomatically smooth over this stage of the process, for you must consider your customer's future patronage.

The great danger in selling it lies in the fact that if it does no good you will be blamed, because you really recommended it and people will say that you worked off some old stuff that no one else would buy, etc., and when people talk that way you may be sure that they will not give you another chance to sell them anything. So be careful to whom you sell "dead stock."

Newspaper Advertising.

Imitation is the sincerest flattery, but when you imitate other people's newspaper ads., you are wasting good money. There is only one way to advertise yourself successfully and that is by writing your own ad. and then follow these rules:

Go over each statement or sentence and trim out the unnecessary words and add better ones; for instance, when you first write your ad. you may use this sentence: "We believe our Toilet Cream is one of the nicest applications for all roughness of the skin"—as much as to say you are not positive about it and never would guarantee it; and as you don't know just what it will do, you say it will be "nice" for "all roughness," etc.

Now there is nothing positive about this statement, and unless yours is the only Cream in town and a lady simply must have some, that statement will not sell any.

"Our Heather Bloom Toilet Cream is the best preparation for chapped hands." This statement is positive and removes doubt, or rather, it does not allow a suspicion of doubt to enter the mind at all.

Now, when you have cut up and boiled down your two or three hundred word essay, it will look like the following set-up ad, in the paper that goes to all your customers.

Place your ad. on the most important page of the paper. It costs a little more than other locations, but the returns will more than make up the difference.

Heather Bloom Toilet Cream

The best preparation for chapped hands
as made by your druggist **JONES**

Just a little better than any other; honestly, we don't see how it could be improved upon at any price, and we've had 20 years' experience with it, too.

A generous sized bottle for 25c

When this ad. runs in the paper be sure that you have a window display of your Cream that same week. This is very important and more than doubles the selling power of the ad.

Do not get funny in your ads., talk sense, say as few words as possible, and when you are through, stop!

One of the best things we ever heard about newspaper advertising is this: "Don't talk over people's heads; write for the uneducated and wise men will profit thereby. Uneducated people are in the majority."

CHAPTER XIII.

One of the most important window displays that any pharmacist can make at the present time, is a "professional display"; many naturally object to such a display, but all objections will be overruled when the possible cash returns are carefully considered.

One Objection Overruled.

The greatest objection comes from those pharmacists whose prescription business is limited, but the same methods hold good here that would obtain if you were introducing a new line of goods that you have never handled before; you would display them in your window.

Such a professional display in this case would include a display of apparatus, drugs and operations which you use in making some frequently called for preparation, as Tincture Arnica by percolation, or one of your family medicines; and then when you have interested one or more of your physicians

in writing prescriptions, the window will afford you a most powerful help by letting people know it.

This display is a source of novelty and interest to the public. It impresses people and instills into them the idea, unconsciously, that you have power and capability where they did not suspect it. It makes them inquisitive. They see something they are eager for and which other stores do not exhibit, and it produces friendship for you, just as if you had disclosed a valuable secret.

And when the people are your friends, the rest is easy. This display does not sell anything directly, yet it is one of the best business-getting propositions that you can initiate.

The Display.

In the middle of the window place your pill tile or pill machine, pill finisher, a pill mortar and spatula, a pill mass in the mortar and some pills on the machine; also a box containing some pills with the labelled box cover, just as they would appear if you had put them up, ready to be delivered.

On a small card, write the words, "How we make pills," large enough to

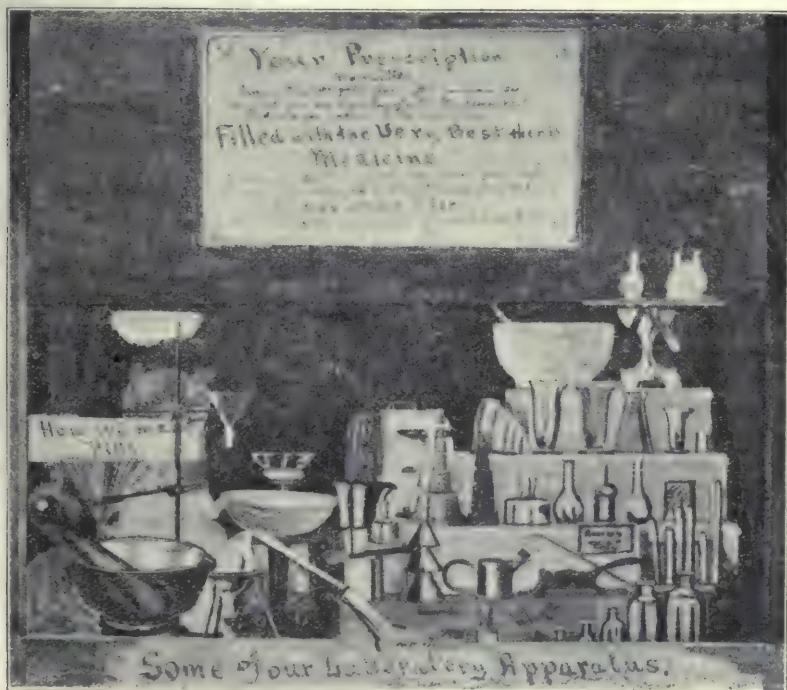
be easily read from the outside and place it in front of the pill display.

Now on either side place the other articles of the display, as the dispensatory, preferably open at a page where an illustration is shown, a scale with weights, a few graduates, mortars and spatulas, and a percolator mounted on a stand and showing the process of percolation, as Tincture of Cardamon Compound.

Appropriate cards would be these: "The way we make our tinctures," "Some of the apparatus we use for preparing your prescriptions and analyzing medicines." Make the cards tell something; the public will like you better for it.

Then you add to this display a suppository mould; a few chemical flasks, one preferably on an alcohol stove, some evaporating dishes, a few funnels, a test tube rack with test tubes, some of which may contain colored liquids and such other articles as are appropriate and which you may have.

A few one-half, one or two gallon bottles with various medicines, neatly labeled, may be included, also a file of prescriptions.



The Public Likes Such a Display.

Have plenty of small signs; ten are not too many for such a window, like this: We put up 7,538 prescriptions last year," "We fill so many prescriptions because we do it right," "Every prescription is put up by a registered pharmacist," "Every medicine we make is made right," etc.

In an ordinary picture frame with a glass about 12x24 inches, put the following placard:

YOUR PRESCRIPTION
No matter how thoroughly your physician examined you, or how carefully he prescribed, it is all for nothing if that prescription is not
Filled with the very Best Medicine
—medicine that is absolutely pure, genuine, full strength and put up by a skilled pharmacist.
In Our Drug Store
we have only one grade of medicine, the very best.

Your diploma or certificate will also increase the value of this display and will give the public an opportunity (probably their first one) to realize that you are a professional worker.

An Ornament.

A brilliant and most attractive, as well as an exceedingly appropriate, ornament and center piece for this display can be made as follows:

Alum, Magnesium sulphate, Zinc sulphate, Iron sulphate, Copper sulphate, Potassium sulphate, Sodium sulphate, of each one part; powder coarsely and mix. Now place this mixture in a shallow vessel of appropriate size and pour over it just enough boiling water to cover it well (about 1 pint to each ounce of the mixture). The vessel must be placed where it will not be jarred and must be protected from dust.

When evaporation begins, crystallization also begins, and soon there is formed a mass of very beautiful and brilliant crystals, each of its own peculiar shape and color. When the process is complete, place in the window and cover with a closely fitted bell glass.

The Telephone as an Ad.

Isam M. Light, secretary of the Chicago R. D. A., and probably one of the hardest working members of the N. A.

ISAM M. LIGHT

PORTLAND PHARMACY

LIGHT & BATTLES
PRESCRIPTION EXPERTS

6001 WASHINGTON AVENUE

CHICAGO..... 190...

PROMPT BUYING BY TELEPHONE

From an UP-TO-NOW DRUG STORE

Simply telephone us your wish, - a messenger will promptly deliver it. If necessary he will call for the order. It may be a prescription that you wish filled, he will call for it, have it filled and return it to you quicker than you can order yourself.

Perhaps you are in a hurry and haven't time to visit our store?

Perhaps it is raining and you don't care to venture out? And yet you want something from us

What to do? Just call up our phones and the article you wish will be very promptly delivered to you. No extra charge. Our Free Messenger Service simplifies matters. - A trial will convince you - try us.

LIGHT-and-BATTLES

Prescription Experts.

R. D., is a great believer in printer's ink.

The Portland Pharmacy, Light & Battles, is situated in a residence neighborhood and the telephone plays an important part in the store's business, hence a type-written "telephone" letter on their regular stationery is sent out, soliciting this class of business.

The subject matter of one of these is reproduced herewith, and when it is considered how the ladies "do hate to dress" just to get some article from the drug store, we can readily see that this kind of advertising will be effective.

CHAPTER XIV.

One of the most successful ways of winning trade is by means of newspaper advertisements, but you must coach your printer constantly to produce pleasing and artistic effects.

Change your ad with every issue of the paper and to be sure that this will occur, keep the printer supplied with copy for two or three weeks ahead, remembering, however, that your window display should always correspond with your newspaper advertising.

Good Ads.

The following few ads are typical and are what may be called "boiled down" ads., ready for business; these

PRESERVE YOUR TEETH

BY USING

**Smith's Tooth Powder and
Smith's Tooth Brushes**

☐ Our Tooth Brushes are well made and will not shed their bristles.

☐ Our Tooth Powder is very fine, agreeable, efficient, and preserves the teeth.

Price of the Powder, 25c per box. Brushes from 10c up to 75c each.

We guarantee any brush over 20c.

SMITH'S DRUG STORE

ads are not only for newspapers, but can be used on counter slips to insert with packages, for circulars, booklets, your own store paper, or envelopes, etc.

Do your own thinking in making up these ads, originality is where success lies in ad writing. Make your own ads for the same reason that you make your own preparations.

Your Own Ads Are Best.

It pays you more money and gives better satisfaction.

You may have been advertising your whole stock during a year's time in the newspaper, some parts of it probably two or three times, and Mr. Jones has read your ad every week—but as Mr. Jones has been very fortunate in not needing anything in your line, he has bought nothing.

**A Good
Hot Water Bottle**

**Is often worth \$10.00 in times
of great need.**

We have that kind for \$1.25--\$1.50--\$1.75
And We Guarantee Them.

**We will replace any
that prove defective**

When you want anything reliable, get it at

SMITH'S DRUG STORE

But if he ever does need anything, your store will be the one that gets his trade—it never fails. This, of course, is a very extreme case, but it shows the cumulative value of advertising.

Newspaper Writeups.

When you are fairly well acquainted with your printer write up a short article about your store for your paper, say every six weeks, and if you have a regular contract with him, there will be no charge made for it.

Many druggists are doing this in various states and it pays them well, naturally in an indirect way.

An article like this would be as follows:

We are pleased to note that the business of our druggist friend, Brown, is increasing at such a rate that several changes will have to be made in the interior of his store. Extra shelving will be added, making the store room much larger. A large new prescription case will be installed, the finest in this part of the state. Mr. Brown has been in his present location for 11 years and during that time has built up a splendid business by fair dealings with his patrons. His stock is always in splendid condition and no substitution is practiced. You get what you ask for.

Household Ammonia**---that's strong**

Ours is real Ammonia, too. In a pint of our Ammonia there is more strength than in three pints of the common kind

A full pint for 25 cents

Compare our real full pint bottles with other so-called pints.

Smith's Drug Store**Opening a New Pharmacy.**

In opening a new store, or buying an already established one, never let the chance go by without an announcement. In issuing this announcement, get away from old stereotyped phrases and say something new, touching upon the more important subjects as they refer to you in the following outline:

OPENING ANNOUNCEMENT.

I am about to open a drug store, located at the corner of Green and Vine streets, on the Fourth of March, 1909.

From what I can learn by inquiry and investigation, a first class drug store is a great necessity in this locality.

My store is fitted up completely and carries everything a first class place should have—the laboratory equipment is perfect and I am in position to make my own medicines accurately and scientifically.

Your prescriptions will be safe with me, as I have everything necessary to fill them correctly.

I sell only one grade of medicines, the absolutely pure kind. My sundry stock includes the best in stationery, rubber goods, sick room needs, soaps, perfumes, cigars, candy, sponges, soda water, patent medicines, etc.

To show that I am well qualified to run a drug store and able to care for your wants properly, will say that I have been in the drug business continually since October, 1893, and am a graduate of the St. Louis College of Pharmacy.

I possess references from such well known pharmacists and physicians as and I extend to you a hearty invitation to come and get acquainted with me and my store—come any time, whether you purchase or not.

Very sincerely yours,

X. Y. Z. Smith.

This announcement should be printed on a good quality of paper.

CHAPTER XV.

Who sells all the sponges and chamois skins that the people in your neighborhood buy—and the people do buy very many of these articles and could be induced to buy a good many more.

Sponges and chamois skins are not displayed as thoroughly by the pharmacist as their importance warrants, and in fact, few retailers store or display them alike.

Only One Remedy.

There is only one remedy, and it is a successful one for increasing the sale of such sundries as these and which form a necessary adjunct of the present day drug store. (In 15 or 20 years from now it may be different.)

The trouble here seems to be the same as it is with the sale of soaps, cigars, stationery, etc.; not a sufficiently varied stock is kept, neither is it displayed nor advertised properly, and the trade goes elsewhere.

The remedy is—display—nice clean display with small neat price cards, and where it can be seen. Everything else being equal, people would rather buy these things from you than from any other merchant.

Business conditions at the present time compel the druggist to sell sundries, and the people of the present time want to see things, they want to

see a display of what they are going to buy and, in consequence, their purse strings are more readily loosened.

It has been asked, times without number and by hundreds of retailers, where shall I put all these things? I have not the money to buy them with; I could not display them if I had them—and many similar remarks.

Only One Way To Success.

These questions bring to our notice the fact that we are too eager to enter business without being properly prepared for it; and also a much more important one, which happily is fast being corrected, and that is that pharmacists in the last 15 or 20 years have been working away from the laboratory, instead of towards the laboratory end of the profession.

You have no right to go into business for yourself nowadays until you have sufficient capital to operate a store properly and a large enough room to properly display a good assortment of sundries.

Until you have this capital and room, you are constantly handicapped and very seriously so. It gives your competitors, whether brother pharmacists, grocer or department store, an advantage over you that keeps you under him.

The New Sponge Case.

To come back to our subject: A most desirable and proper way to display sponges and chamois is to have an extra wall-case made for them, one that will conform in style and finish with the rest of your fixtures and the details of which are best planned and figured out with your fixture maker.

The compartments in this case can be about 12 inches high, 12, 15 or 18 inches wide and as deep as the nature of your shelving will permit.

You will have as many compartments as you have kinds of sponges and it is policy to have as many kinds as possible, for a well displayed and well assorted line of sponges is a money-maker and will bring you much new trade.

These compartments are fitted with wire baskets in such a manner that

they may swing outward in order that the contents may easily be reached.

The entire inside of the case may be wire work, as much for the sake of economy as for cleanliness, as any sand and refuse will then find its way to the bottom, where it is easily removed.

The case should be fitted with one or more glass doors and when completed represents a "money-making sponge machine."

Put the price prominently on every compartment and stick to your prices; tell your customers the difference between good and bad, expensive and cheap sponges, and that bleached sponges as a rule are a poor investment, because the fiber is ruined and they soon fall to pieces.

Chamois Skins.

Some space for a few shelves, preferably in the middle of the case, should be reserved for chamois skins.

Some chamois skin information may be of value to assist you with sales: The name, chamois, is really a misnomer when applied to the article generally sold under this name, for there are not enough genuine chamois skins gathered in a whole year to supply the United States for one day.

The genuine oil tanned skin is always of a yellow color.

What is sold under the name "chamois" is generally the oil-tanned skin-lining of the sheep or lamb, and for ordinary use is preferable to the genuine. A very light straw colored chamois is also in demand, which is produced by bleaching with sulphur. This weakens the skin and also renders it unfit for any use with silverware.

Another variety, steel colored chamois, is really chrome leather, produced by tanning with the "chrome" process; these are very strong, stand much abuse, can be washed in very hot water and are a very valuable piece of goods.

Ad Criticisms.

We have the newspaper ad of R. A. Doyle, East Prairie, Missouri, for criticism, consisting of single column reading matter, 12 inches long and headed "Doyle's Column." The read-

ing of the ad. is good, but as there are seven different paragraphs, each talking about a different subject, the reader will be tired before he finishes and the greater part of the ad's. effectiveness is lost.

The proper thing to do will be to change to a 3-column 4-inch, or a 2-column 6-inch display ad., with a neat border, and advertise only one thing at a time and change copy each week.

The following are advertised in this reading notice: Doyle's Cough Syrup, Doyle's Blood Medicine, Post Cards, Stock Food and Poultry Powder, Doyle's Pills, Doyle's Face Cream and Prescriptions.

The Stock Food and Poultry paragraph of the ad. follows:

What about stock food, are your stock doing as well as they should? If not why not? They need a tonic to help them through the winter. Security stock food will make them look better and keep them in good health, have them in fine condition for the spring work. And now is the time to make your chickens pay for their keep, they do it by laying eggs. If yours are not laying, a package of my poultry powder will make them lay. You can't afford to be without it. Don't wait till spring, when everybody's hens are laying and eggs are cheap, make your hens lay when eggs are high, then you will make money off them.

If this were set up as a nice display ad. 3 columns wide and 4 inches deep, it would appear somewhat as follows, and it would sell more poultry food:

Money in Eggs

The time to sell eggs is NOW when the price is high. The way to get lots of eggs NOW is to feed your chickens

Doyle's Poultry Powder

This POULTRY POWDER makes your chickens healthy, active and vigorous. Full directions with each package. A pound package only costs 25c. A three-pound package costs 50c. Only at

DOYLE'S DRUG STORE, East Prairie

A tonic like **DOYLE'S STOCK FOOD**, fed to your horses now, will keep them in good health and have them in fine condition for the spring work \$1.00 for a large 7-lb. package.

Prices must be given in every ad., and remember these iron-clad rules: Talk common sense; talk business; be short but definite, and set up a "good looking" ad.

Don't you see that the statements made in the above display ad., if true, render such expressions as "the best," "remarkable," "marvelous," and a host of other circus phrases and adjectives, wholly unnecessary.

The homely and simple truth in an ad. is the great selling factor.

CHAPTER XVI.

The ordinary newspaper ad. is much in need of revision, hence care must be exercised in building it, that the money spent may not be wasted.

There is nothing so good as a good newspaper ad. and our sole object is to teach the retailers how to make these ads. good.

One Thing at a Time.

The idea of "one thing at a time" is the proper one, although at times exceptions are permissible, but only when one article suggests another or is in some way closely related to it.

There is no doubt but what advertising in some form or other is productive of good will, dollar and cents, an increasing custom or a good name, but the advertising must be "right."

Whenever you have an exceptionally good ad., and yours can all be made so, have your printer run off a supply of counter slips from it to be used to insert with all packages that leave your store; then if you have a window display to correspond with your ad., you will have a money making combination.

How to Change an Ad.

The following ad., which appeared as a reading notice with a number of similar ads. from the same druggist, is not liable to sell much Cough Syrup; besides, never advertise anything for 5c or 10c. The tendency should be away from five and ten-cent sales, for they bring you no net profit, do not benefit the people, and only spoil larger sales:

How Is That Cough?

Remember that Pike's Cough Medicine cures coughs and colds, and it is only 25 and 50c per bottle. If you want a cough

drop, I have three kinds, Dean's Mentholated, Smith Bros., and the genuine Hoarhound Cough Drop, the kind mother used to make, a handful for 5c. Don't let that cough run to pneumonia, but stop it now, it will only cost you 50c, perhaps only 25c.

Here is the way this ad. should look, as a display ad., either one, two or three columns wide:

Don't Neglect a Cough

It may be the cause of pneumonia

Pike's Cough Medicine

Is an Insurance Policy against Throat and Lung Diseases

Every Bottle Guaranteed

Pike's Cough Medicine has been sold for 12 years and it is today the best seller in our store

Price, 50c per Bottle
(Sample Bottle 25c)

ONLY AT PIKE'S DRUG STORE

The better the get-up and arrangement of an advertisement the greater will be the returns it will bring.

The idea of calling your 25c size a sample size in your newspaper ads. is one of the best schemes to sell the larger 50c size.

Ad. Must Be "Well-Dressed."

We have mentioned it before, but as it is such an important factor in "drawing" power, it will bear emphatic repetition, that your good and effective copy may be spoiled by the printer if he is not down-to-date.

Your ad. must be set up well, it must show good taste and display, type must be new and modern, and the border plain and neat.

Grace & Bodinson, Baker City, Oregon, write they have always found that if an article has merit, window display and newspaper space will always sell it. All the druggists of Baker City have agreed not to give any premiums and in consequence are money ahead.

This firm also uses the monthly drug store paper and finds it very effectual in branding their name on the minds of the public.

Shaw's Pharmacy, Plainfield, N. J., has a unique way of advertising by

means of small circulars, 3x3½ and also some smaller ones.

We reproduce the subject matter of one of these, quoting Shakespeare:

Winter.

When icicles hang by the wall,
And Dick the Shepperd blows his nail,
And Tom bears logs into the hall,
And milk comes frozen home in pail,—

When all around the wind doth blow,
And coughing drowns the parson's saw,
And birds sit brooding in the snow,
And Marion's nose looks red and raw,—
—Shak.

THEN USE OUR UNEXCELLED

SYRUP WHITE PINE COMPOUND WITH TAR

FOR

COUGHS, COLDS and HOARSENESS

SHAW'S PHARMACY

207 WEST FRONT STREET
PLAINFIELD, N. J.

A. C. Woerfel, at Sawyer, Wis., has a way of selling cough syrup that in his case has made big inroads upon the business of medicine peddlers and mail-order houses.

A window display of cough syrup was made and also a nice display in the store room. The Cough Syrup used was the White Pine Compound, 12-oz. size, price \$1.00, and called "Woerfel's Aseptic Balsam."

Then a descriptive circular letter was sent to every family in the vicinity for miles around, containing strong arguments for the many good qualities of the preparation, and a notice at the bottom, stating "Bring this and 50c and you get a \$1.00 bottle of Aseptic Balsam."

Sawyer is a town of only 700 inhabitants, but Mr. Woerfel sold 173 bottles of his Cough Syrup the first 53 days that the scheme was worked.

CHAPTER XVII.

In our recent talks on newspaper advertising we have held to the sensible idea of advertising one thing at a time and to describe this one thing as completely as possible in a few pithy sentences.

Now, after you have had some experience

in this work and can see more clearly why this is done, we will give the reason for it.

We believe that if advertisers have a little expensive experience first without becoming discouraged, and then have real reasons and theories drummed into them to confirm or weaken their ideas, then you will make the successful and real advertiser.

Reasons for Failure.

First, the beginner is going to overcrowd his space, as he wants to get a whole page full of facts into a small space, on account of the price.

Second, finding this method extremely unprofitable he unconsciously switches to the other extreme and becomes general and literary in his statements. This method is worse than the one discarded, for, as nothing is offered, no sales are likely to be made and the ad. is found to be unprofitable.

Third, becoming desperate, "knocking" is resorted to, either direct or by implication, and when you advertise your competitors instead of yourself, it is of course your competitors who get the benefit, whatever it may be. Fourth, and apparently the last method, is resorted to, of simply inserting an announcement, which in reality is simply a "sign."

A newspaper is a place for news, both as regards the reading matter and in the advertising column; the people are looking for news and your ad. must be "newsy" or it fails in its mission.

Say something definite without crowding, without being general, without "knocking."

The principle is exactly the same as when you sell an article. For instance, a customer calls for a fountain syringe and as he has very little knowledge of kinds, quality and prices, how are you going to sell that customer the syringe he needs?

Applying Your Newspaper Statements to Actual Customers.

Are you going to begin by telling him the history of rubber, from the planting of the tree to the finished product—but that's what you are doing when you crowd a whole page full of facts into a small two or 3-inch space.

Are you going to begin by saying that your stock of drugs, medicines, sundries, etc., is pure, clean and reliable, and that your service is of the best, etc.—but you are doing just exactly that very thing in your general literary advertisement.

Are you going to say that your competitor's syringes are no good, old and shop worn, that no satisfactory syringe can be bought there and that he is a poor man to deal with—of course you would not, but you are doing this thing in your "knocking" ad., only you did not realize it.

Or are you simply going to tell your customer that you carry a complete stock of all kinds of syringes, and then wait for him to make the next move?

What You Really Do.

No, you will do none of these foolish things, but you will immediately proceed to display one of each kind of your syringes on the show case, state the difference in the grades, why some are more expensive than others, why some are guaranteed and others are not, etc.

That's what you will do and you will keep at it until by various suggestions you have prevailed upon your customer that he has just what he needs and is willing to pay for.

Now, why don't you apply this same principle to your newspaper ad.—for if your newspaper ad. is to sell goods you must go through the same process as when your customer is before you, otherwise your efforts are for naught.

The following display ad. in your newspaper is exactly what you have said to your customer which has re-

sulted in a successful sale, and is stripped of all superfluous verbiage and condensed:

The last paragraph about hot water bottles, etc., could be replaced by the following: "We also carry a very complete line of good but cheaper fountain syringes, at 65c, 75c, 90c and \$1.00, the quality of which is not as good as in the 'Marvelous' line, and therefore we cannot guarantee them."

There is a certain sort of magnetism or enthusiasm in an ad. like the above that immediately attracts a possible buyer.

You have been at some expense and worry and foresight in picking out this "Marvelous" line of rubber goods, your expectations on receiving the goods from your jobber have been realized, and you are enthusiastic.

The enthusiasm is reflected in your ad., with proper limit, and it becomes contagious in your prospective customers. Try it.

CHAPTER XVIII.

Many pharmacists are as yet not alive to the possibilities of the show window as a direct selling factor, and are content from week to week to put in "anything that may be handy."

Too often also the matter is left in the hands of subordinates who are only too apt to show off the "beautiful advertising" of some nostrum, because it's easy and soon finished.

It becomes the duty therefore of the proprietor to advise as to the character of the display and to let the clerk work out the details.

Display those things that are in demand at seasonable times, that you may head off purchases which might go to other merchants.

People Buy When They See.

In the month of March, for instance, very many families need certain house-cleaning specialties, as bug exterminators, furniture polishes, etc., and they do buy them.

Now there are various classes of merchants who sell these things in your neighborhood, and if you are the one

No More Leaky Syringes

Our line of **Guaranteed Fountain Syringes**, the "Marvelous" line, is far superior to any kind of syringe that has ever been made.

**Every Syringe a Perfect One
Guaranteed for One Year**

We have all the different sizes. Prices as follows:
2 quart, \$1.35 3 quart, \$1.60 4 quart, \$1.75

We also have the complete line of "Marvelous" Hot Water Bottles and the "Marvelous" Combination Fountain Syringe and Hot Water Bottle. **Every One Reliable.**

PIKE'S DRUG STORE, 100 Main Street

who displays them in the window, you will be the one who does the greater part of the selling.

The same idea holds good for all general supplies, every month of the year, hence an aggressive campaign on your part in doing consistent window advertising will prove a very profitable scheme.

Again, the raw month of March produces much rawness and roughness of the skin, and remedies for this class of complaints are legion and are sold by various kinds of merchants, beauty parlors and lady peddlers.

It is apparent then, with the demand already existing, that a good window display of goods of this nature is bound to make a prospective purchaser of the passer-by.

March Displays.

A few window displays for the month of March that are suitable and seasonable could be made from the following:

Sponges, Brushes and Whisk Brooms; House-cleaning Specialties; Poultry and Stock Foods; Wall Paper and Paints; Bird Seed and Fish Food; Dog Remedies; Dye Stuffs; Sick Room Supplies; Toilet Creams, Etc.; Cough and Cold Preparations; Prescription Display; Thermometers; Antitoxins; Hair Tonic; Spring Medicines; Flavoring Extracts; A Display of Petrolatum; Soaps; Etc.

The displays should be accompanied, whenever possible, by some secondary illustration regarding origin, uses or relations, for its impressive effect and emphasis.

This can be done, when no other means are at hand, by a number of

plain placards, telling in a very few words the points you wish brought out and the price.

For instance, in displaying your Spring Tonic, prepare a country scene, illustrating a road by means of sand, stones, a rail fence and twigs, or some artificial scenery.

At the end of this road, well towards the rear of the window, place one bottle of your Spring Tonic, and in a suitable place, the placard: The road to Wellville (or Healthville).

A liberal supply of some of the drugs entering into its composition, with suitable placards, add to the value of the display, as will also several mounted herbarium specimens placed in the background.

A Good Suggestion.

In this connection it is important to state that every druggist should have a small herbarium; it can readily be collected on your vacation and will be of great assistance and value to you in helping out on window displays at various times during the year.

Placards to accompany your display will read as follows: Our Spring Tonic contains nature's best gifts to the sick. Our Spring Tonic costs only 50c per bottle. Our Spring Tonic puts new life into the system.

Your newspaper ad. for the week in which this display is made should advertise this Spring Tonic—and in the absence of a newspaper, a small circular describing the Tonic should be used as an insert with packages leaving the store.

The accompanying reproduction of a newspaper ad. is from Sioux City,

Doctors Write Prescriptions
THAT'S THEIR BUSINESS

We Fill Prescriptions
THAT'S OUR BUSINESS

There's something about your physician's prescriptions that's different from most anything else in writing. It means more to you than WEALTH—it means HEALTH. You want it filled quickly, delivered promptly, and above all, you want the best ingredients called for. WE MAKE A SPECIALTY OF PRESCRIPTIONS. That's probably the reason we fill more than others. TRY US. We promise you the most accurate filling and the most prompt service at most reasonable prices.

BEN J. KLOSTER Red Cross Drug Store

523 PIERCE STREET

A CARD:

We do not prescribe for your ills. That's your doctor's business. If you are really sick, you cannot afford to take chances with the thousand and one so-called "cure-alls" or "quacks." Go to a reputable doctor, and if you need any medicine let him advise you. It's the safest way. It's the cheapest way. It's the only way.

Iowa, and Mr. Kloster has the correct idea of writing "good stuff" for newspaper copy.

This ad. could well be copied by thousands of druggists and if emphasized by a good window display, see page 235, will work wonders in stimulating the most important branch of our profession.

The ad. might be materially strengthened by being positive in all statements, instead of all but one. In the sentence "That's probably the reason we fill more than others," say "That is the reason we fill more than others do."

There is nothing like making a positive statement, when you **know** you are right.

CHAPTER XIX.

Probably one of the most effective methods of novel advertising is the souvenir post card way, as yet tried by but few retail pharmacists.

It is, however, worthy of a thoroughly fair trial, and will always "pay back its expense."

As no advertising is of value unless done persistently and regularly, so it is in this case.

Therefore the proper way to go at this method is to map out a plan, the execution of which will cover the period of one year.

Making Photographs.

Proceed as follows: Procure twelve photographs of local views, such as are thoroughly representative of your neighborhood. One could be a photograph of the interior of your store, or your fountain; another, one of the outside of the building.

Then according to your location, city or country, have photographs made, or purchase some already made, of some of the principal streets; of public buildings, such as schools, churches, etc.; of scenes on a lake or river; forest or park scenes; monuments; of your brass band; of parades or notable assemblages, etc.

There is really no limit to choosing suitable subjects for these photo-

graphs, but twelve are really sufficient for a trial.

Now send these photographs to some reliable post card manufacturer, and have 500 post cards made from each photograph, or as many as you can use.

On the left hand side of the address page, occupying one-half of the card, is the place to have your advertisement printed.

Some post card manufacturers may do this work for you; others may not. It is advisable, however, to have it done by a first-class printer, having them printed as needed.

These cards are then mailed, properly addressed to a list of present and prospective customers, under a one cent stamp, on a certain day each month, either the first, tenth, or fifteenth.

Novel, Pleasing and Effective.

This is a most novel and pleasing scheme, the cards are certain to be saved and if the advertising matter is right, will result in "cash register" activity.

The cost of the twelve photographs may be great or small, according as they are made specially for you or whether you can purchase them out of a photographer's stock. These local view cards are also great sellers (without the advertisements) and for this reason should be ordered made in liberal amounts, and also the amount of profit on sales may more than cover the cost of manufacture, printing and postage.

The cost of manufacture for 6,000 cards (500 each of 12 kinds) will be about \$54, for the black and white (half-tone), and the mailing will cost \$5.00 per month. The total expense for the year will not be over \$120, making a monthly expense of some \$10.00. For colored work the charge is about double and not less than 1,000 can be ordered of one kind.

The "good will" you and your store derives from this campaign is well worth this outlay, to say nothing of the profit derived from sales directly due to it.

The various samples of newspaper ads as found in these chapters will make first-class "copy" for the advertisement to be printed on the cards, and others are herewith given.

A Long-Headed Advertiser.

A reasonable length of time must be given the manufacturer to prepare these cards. It usually requires about

whereas if you only ordered a two or three months' supply the results might discourage you and then you would lose one of the best opportunities to become "a good advertiser."

A good advertiser is a merchant who makes profits and who looks for results at the **end** of a certain period, not at the **beginning** of it.

GOOD SOAP

Ordinarily it is difficult to get Soap that is good at any price.

Most Soaps are hurtful to your complexion because they are made from cheap material.

The New Soap Simon Pure

is the Soap you should use, because it is made from pure vegetable oils; it is sweetly perfumed; it cleanses thoroughly, and will not injure the most delicate complexions.

Per box of three cakes, 25c.

Pike's Pharmacy

113 Main Street

three weeks to prepare black and white, and at least six weeks for the colored work, and get them ready for shipment.

Have the entire 6,000 cards contracted for at one time, that you may give it a thorough trial; a twelve-month period will produce results,

Cold
||
Clean
||
Pure

Our Fountain's Music

Our Fountain is open for the season, and the merry, noisome "sizz" of our ice cold soda is heard again.

Everything is very cold—the water, the syrups, the crushed fruits and the ice cream.

Everything is clean on top and behind the counter.

Everything we serve is absolutely pure; every drink is delicious because we serve it just right.

Pike's Pharmacy

113 Main Street

There is one peculiar thing about advertising that it will be well to remember: Other merchants may have just as good goods as you have, they may even have more, their prices may compare very favorably with yours and they may do business in a location nearer to a prospective customer than yours is, but the customer does not know it, **because he has not been told.**

Protect Your Complexion

The heat and wind of summer, as well as the raw atmosphere of spring, play havoc with your complexion.

An insurance against this is

Pike's Heatherbloom Cream

This cream is composed of pure, harmless and soothing drugs, that preserve the beauty of any complexion.

Price, 25c. Guaranteed.

Pike's Pharmacy

113 Main Street

CHAPTER XX.

It is a mistake to think that what one pharmacist gains through good advertising is another pharmacist's loss. If it were so, most of the business would be in comparatively few hands.

Much of the gain is in the creating of a great deal of new business and this is what you should strive for.

Character in Advertising.

The manner of creating this new business is by means of advertising in one way or another, and the more care you spend on your advertising copy, the more new business you will create.

Advertising possesses a certain character that faithfully reflects the customs, manners and method of the proprietor of a pharmacy, and according as it is forceful or weak, so will the people consider the character of the pharmacist, and be governed accordingly.

The reproduction of one of The McMurray Drug Co.'s (Abbeville, S. C.) ads. appears herewith and while the "one thing at a time" idea is well carried out, there is too much matter in the ad.

No. 1.

EVERY TWO MINUTES BY THE WATCH

A person dies in the United States of Tuberculosis. Do you know how many die each year in South Carolina, in Abbeville County, from that dread monster—The Great White Plague—consumption? The number is appalling.

Right now is the time when we see its effects most pronounced. If possible, would you not do something to protect yourself from its ravages?

NEUFFER'S LUNG TONIC

Is a combination of ingredients of recognized tonic, antiseptic and healing properties. If taken in time will do much to prevent you contracting consumption; for its special action is to strengthen the lungs, build up the broken down tissues and act as a general antiseptic. It is of incalculable benefit in all wasting diseases, measles, colds, grip or wherever there is a persistent, hacking cough. Thousands have used Neuffer's Lung Tonic and testify to its merit. Don't neglect that cough, it may mean a consumptive's grave. Did you ever think of it?

Neuffer's Lung Tonic is only 50 cents a bottle and it may save your life or that of some one dearer to you than life.

The McMurray Drug Company

What an ad should do is to tell the people as plainly as possible what you have for sale, omitting, however, no valuable facts.

INSURANCE AGAINST CONSUMPTION

Consumption is one of those diseases that must be protected against or prevented.

The only prevention is to fortify your lungs and strengthen them.

NEUFFER'S LUNG TONIC

is able to strengthen your lungs, because its ingredients have a direct healing and cleansing action upon the lung tissues and

ASSISTS NATURE TO PERFORM HER WORK

By reason of its healing properties, Neuffer's Lung Tonic is also a valuable aid to convalescents from Grippe, Cold and Measles

Price 50c.

Thousands have testified to its merits.

The McMurray Drug Company

We druggists are too apt to copy the style of the patent medicine advertisements and make too many claims for our wares that are not always true nor necessary. We do this unconsciously and without giving the matter enough serious thought.

Many Ads Say Too Much.

Besides this we unnecessarily antagonize physicians when we make these claims which, of course, is entirely unwarranted and uncalled for.

We should keep constantly in mind the fact that nothing should be stated in an ad. that might reflect on the advertiser, and a great mistake that one is liable to make is in saying too much.

Our experience fully bears us out in this as regards newspaper advertising, and if the reproduction, No. 1, shown should be replaced by such an ad. as No. 2, we will venture to state that an increase of sales will result.

If it is thought advisable and we think it is, a reading notice might be inserted in the paper containing the information given in the first part of the original ad.

That is where it belongs and the "reader" should refer to the advertisement in another part of the paper.

A case of aggressive advertising is noticed in the accompanying illustration and shows what originality will produce. Mr. Thoma has a large



building devoted to his business in Fairfield, Iowa (Thoma & Son), one half of which is occupied exclusively by his wall paper and paint business.

An Original Idea.

The idea of piling up in front of his store an entire carload of wall paper and having a photograph made of it, with the store as a background, is certainly unique. This photograph was reproduced on the front of a four-page folder, the second page of which contains a strong letter, imitation type-written form, to prospective buyers, and the third page contains a few paragraphs giving particular information about Wall Paper and Prices. The fourth page is blank.

The power of this illustration can hardly be overestimated and of itself will be the means of selling considerable wall paper. It tells the whole story, and words merely modify or emphasize the effect already produced in the mind of the possible customer.

CHAPTER XXI.

There has lately come a new form of drug store paper on the market that

it would be well to give a wide berth—in fact, shun it altogether.

The paper, while presumably the druggist's own, and composed of 32 pages, is principally an advertisement for some 30 nostrums and one of which is "Glycol Compound," of prescription nostrum fame and in the same class as Kargon, Oil of Pine, Marmola, Barkola, etc.

The paper goes by the name of "Infant," "Baby," "The Children," as it may suit the fancy of the publisher or druggist, and is issued monthly and unless pharmacists have on hand a large stock of the particular patents advertised in it, it would appear the height of folly to advertise them over their own name in a drug store paper of this kind.

The advertisements for these nostrums occupy 12 pages; 19 pages are occupied by general information, and the front page is for the druggists' card or ad.

Objectionable Features.

The third page has a very objectionable feature and one that pharmacists should hesitate before putting in the hands of the general public.

This page contains twelve formulas of household preparations, mentioning, however, only ingredients and not quantities. These quantities are supplied by the publishers to such druggists only as are subscribers to the paper.

These formulas are of a nature to produce "Home made druggists," and sooner or later will act as a boomerang to the druggist circulating the paper.

The entire principle of the scheme is wrong from a retail pharmacist's viewpoint, however profitable it may be for the publisher.

We believe a very extended circulation of such a paper would be nothing less than a national calamity for druggists.

The present-day tendency is to push your own make of domestic remedies, profit protected proprietaries and to send sick people in need of medical advice to physicians.

Formulas of the kind in this paper will also have a tendency to bring cus-

tomers into your store asking for ten or fifteen cents worth of "this stuff" and this is in direct conflict with your good business sense.

Let a druggist be a druggist, a butcher a butcher, let carpenters build houses and let the housewife tend to her home duties; this is the way for you to look at this matter, and while no harm may be done the public by knowing what a medicine contains, it does no good whatever; a little knowledge is a dangerous thing at times, and especially so when the general public become their own physicians and pharmacists.

A "Home-Made" Four Page Paper.

A very neat little four-page paper is gotten out by Sherwood, of Cleveland. The subject matter is all gotten up by Mr. Sherwood himself and, with a few exceptions, is good stuff for drawing trade. The paper is entitled "Sherwood's Drug Bulletin" and is issued monthly, the pages being 7x10 $\frac{1}{4}$ inches. The first page contains "Store News" in the left hand column, being short paragraphs on hand brushes, telephone service, 111,000 prescriptions filled, reduction in the price of chamois skins, a new soap called by their store number "5427" and safety razors. The right hand column contains an excellent article headed, "Tell your doctor we fill your prescriptions," and a small ad on the bottom with special border on a "special for March" in cigars.

Page 2, left hand column, contains a good Soda Talk and a short article on Stationery, with illustration. The right hand column contains 70 nostrums and infant foods at cut prices.

Page 3 is reproduced herewith, while page four is a neatly gotten up page, containing a specially-bordered ad on Tooth preparations and another on Talcum and Face Powders, both at cut prices. The bottom half of the page is a good ad on "Sherwood's Balmine" that will sell this Toilet Cream.

The reproduction of page 3 shows the general get-up of the paper, and the objectionable features noted is the long list of 70 nostrums at cut prices.

We will say "cut prices" advisedly, however, as the cut is not very deep

Here's Syringes and Hot Water Bottles of Sterling Worth Attractively Priced

The kind of Syringes and Hot Water Bottles WE sell people cheerfully pay our price for. All the way you have a right to expect in every one, and any defect that may cause a leak before it is covered by our broad and generous guarantee.

The rubber in the new line we just received is so full of "life" and the bags are so thoroughly well made that we really believe they'll outwear two of the ordinary same priced kind.

A splendid 2-quart Fountain Syringe, good quality of rubber, three hard rubber pipes. Our price.....\$.79	Two-quart Hot Water Bottle, well made, reliable material, one that has been giving excellent satisfaction. Our special price.....\$.69
Fountain Syringe, 3-quart, rapid flow, three hard rubber pipes. Our price.....\$.98	Seamless Hot Water Bottle, red rubber, hard rubber ring. Our price.....\$1.00
Seamless Fountain Syringe, 2-quart, three hard rubber pipes, hard rubber ring; a very popular syringe. Our price.....\$1.25	Zephyr-Margon Hot Water Bottle, 2 quart, light and durable. Price.....\$1.00
Fountain Syringe, 2 quart, combination of cloth and rubber; will last for years. Our price.....\$1.29	W-T Co's Special, 2-quart, high grade rubber. Our special price.....\$1.65
Combination Fountain Syringe and Hot Water Bottle, extra quality red rubber, 2 quart; three hard rubber pipes. Our price.....\$1.65	Flashed covered bottles, high quality of rubber, capacity 2 quarts. Our price.....\$1.00
Whirlpool Spray, a successful syringe, equal to those costing double. Our price.....\$1.80	Same as above, capacity 3 quarts.....\$1.25
	Peerless, a high grade maroon bottle that will give the very best service, 2 quarts, \$1.25; 3 quarts.....\$1.65

For Men—About Cigars

You might as well get your full money's worth when you buy cigars as to get but a part.

If all the fragrant aroma has been dried out your \$5.00 or 10c cigar, you might as well buy a penny one.

Cigars must be cared for—must be kept tight, if they are to retain their good.

We've gone to the expense of building a little room especially for cigars—made a place to keep them as they should be kept, in a way that all their natural aroma be retained until they reach the smoker.

We've done this to make our cigars better—to make them so much better that smokers go out of their way to come here for them.

We carry about all the very best brands of cigars, as well as cigarettes.

Most smokers are discriminate about cigars. They know good quality. To such the goodness of our cigars will appeal most forcibly, and to these we most cordially invite to call and inspect our line, notice the high grade brands and their splendid condition.

About Our Good Candies

You have a right to expect most everything to be as little better as Sherwood's.

To exceed your favor is a cardinal principle of our business success.

Candies, for instance.

We select only the richest and smoothest flavored confections, and always have them here at their freshness and elegance.

Bowes-Allegretti Co.
BON BONS AND CHOCOLATES

In our efforts to make our store the headquarters for good candies we offer you the product of the world's best makers—candies delicious enough to more than please the most fastidious eater of sweets, pure enough for the baby, and yet priced reasonably enough to suit everybody.

Especially for gifts we always have appropriate and artistic packages that we can fill most any want without delay.

and may be "schedule prices" for that city.

Why Advertise Cut-Prices?

"Cut-Prices" leaves a bad taste in the mouth with many discriminating buyers, and generally it operates against more desirable sales, often unjustly.

The general skill displayed in getting up such a good readable paper, if devoted to a few more "quality" talks in place of the nostrum ad, would surely produce a much more effective advertising medium.

We know by experience that, as a rule, physicians do not feel kindly disposed towards a pharmacist who advertises nostrums, and with the same breath seeks their prescription patronage. The two don't hitch.

Cut prices might bring considerable profitable trade to some stores, but nine times out of ten the profits are greater from well-advertised domestic remedies built up on quality arguments, and these latter also tend to a more substantial and permanent business.

CHAPTER XXII.

You have doubtless spent considerable time in preparing a nice line of flavoring extracts and spices, have secured a good quality of tea, chocolate, cocoa, and honey in suitable and popular sizes, now the question is, how are you going to sell them?

The best scheme would be to issue a "Pure Food and Drug" circular, booklet or card.

In case an eight-page booklet is used the following would be appropriate material, with any changes necessary for local conditions.

Page 1—Title page, **Smith's Pure Food and Drug Bulletin**, with address, telephone number of store, established since when, etc.

The other seven pages are roughly produced herewith and should have considerable thought and attention on your part, that they may become an effective selling medium.

It should be an easy matter for you to secure some house to furnish you with what you want in spices, tea, chocolate, cocoa and honey.

The pages are, consecutively, pages 2, 3, 4, 5, 6, 7 and 8, of your booklet. If you prefer to get out a circular or a

I am now prepared to furnish my customers absolutely pure flavoring extracts, spices, tea, cocoa and chocolate and honey.

Everything in this line I guarantee as strictly pure and the best of its kind on the market.

While the price may be a little higher than what you have been paying for similar articles, you have the assurance that these are actually pure goods, and none other should find a place in your home.

I have been repeatedly requested by many of my customers to take this step, and, feeling the need of complying with their wishes, I have succeeded in getting a first class line of these products.

You will make no mistake in buying these goods from me, as all are guaranteed.

Respectfully yours,
F. X. Y. Smith.

HONEY.

This Honey has a most excellent flavor, and a rich, clear, canary color.

It keeps well, as it is the very best grade.

It can be used also for medicinal purposes.

This Honey is put up in the following quantities:

1/2 Pint bottles.....20c
1 Pint bottles.....35c
1 Quart bottles.....50c

SPICES

I would not like to have you compare my prices on spices with others, but would like a comparison on quality.

It is a fact that many powdered spices as on the market at the present time are grossly adulterated, many containing as high as 80 per cent of impurities.

You can readily verify this by studying the reports of the Pure Food and Drug Commission, who are daily condemning quantities of so-called spices.

Our powdered spices include the following list, and all come in sealed, sprinkler top tinned boxes, at 15c and 25c per box: Black and White Pepper, Red Pepper, Mace, Nutmeg, Cinnamon, Ginger, Allspice, Dill, Curry Powder, Turmeric, Black and White Mustard, Cardamon, etc.

Whole spices are put up the same as the powdered, except that no sprinkler top is used.

Weight of spice is plainly marked on each package, and is either 1, 2 or 4 oz.

card, the matter can easily be changed to suit. Additional articles can be added, as baking powder, if you think proper.

Flavoring Extracts

These Flavoring Extracts are of my own manufacture and the quality is the best.

A t. al will convince you of their superior merit.

FLAVORING EXTRACT VANILLA.

Absolutely pure.

2-oz. bottle.....25c

4-oz. bottle.....50c

COMPOUND VANILLINE FLAVORING.

An aromatic blend of various genuine oils and Vanilline.

2-oz. bottle.....25c

4-oz. bottle.....50c

We would advise the purchase of large bottles, as the older the above flavors are, the more delicate and sweet is their aroma.

FLAVORING EXTRACT LEMON.

Absolutely pure, containing nothing but Fresh Oil of Lemon, Lemon Juice and Alcohol.

2-oz. bottle.....25c

4-oz. bottle.....50c

FLAVORING EXTRACT ORANGE.

2-oz. bottle.....25c

Enough of these booklets should be printed for three distributions; this will not only be a direct money-making advertisement, but the indirect publicity and good-will given your pharmacy will bring you many a good, steady customer.

TEA

We have taken especial care to select a most desirable grade of tea for our customers.

It is uncolored and coming as it does from India, is prepared for market by scientifically accurate and very clean methods, something about which most teas cannot boast.

This tea is put up especially for me and should prove a very desirable addition to any household, where this beverage is used.

It comes in four sizes, as follows:

$\frac{1}{8}$ lb. tins	15c
$\frac{1}{4}$ lb. tins	25c
$\frac{1}{2}$ lb. tins	45c
1 lb. tins	80c

We will guarantee absolute satisfaction or return your money.

Chocolate and Cocoa

There are many kinds and varieties of cocoa and chocolate on the market, but according to our judgment the following are absolutely pure and reliable.

We know they will give you good satisfaction and I would be pleased to have you try them.

SMITH'S RELIABLE POWDERED CHOCOLATE.

$\frac{1}{4}$ -lb. cans	30c
$\frac{1}{2}$ -lb. cans	55c
1-lb. cans	\$1.00

Bitter Chocolate, in bars, per lb.	50c
Sweet Chocolate, in bars, per lb.	50c

GREASELESS COCOA.

$\frac{1}{4}$ -lb. tins	25c
$\frac{1}{2}$ -lb. tins	40c
1-lb. tins	75c

For a delicious cup of cocoa or chocolate, or for baking, the above quality goods are unsurpassed.

The above powdered Chocolate is the only kind we use at our Fountain.

Don't consider it beneath your dignity to sell these articles from the mistaken idea that they are groceries; they are not groceries, but drugs in the truest sense of the word, almost every one being an official drug of our United States Pharmacopoeia, eighth revision.

The trouble is, as has been repeatedly stated, that the pharmacist has gradually allowed this profitable and

legitimate business to be taken away from him without a struggle.

Times are changing, and as a sensible business man you should use your best endeavors to regain this business. It's yours, and no one else's; therefore, prove to the public that you are entitled to it by offering a better grade of this class of goods than they can buy elsewhere.

Flavoring Extract Wintergreen	
2 oz. bottles	25c
Flavoring Extract Almond	
2 oz. bottles	25c
Flavoring Extract Cinnamon	
2 oz. bottles	25c
Flavoring Extract Rose	
2 oz. bottles	25c
Flavoring Extract Pistachio	
2 oz. bottles	25c
Flavoring Extract Strawberry	
2 oz. bottles	25c
Flavoring Extract Pineapple	
2 oz. bottles	25c
Flavoring Extract Banana	
2 oz. bottles	25c

I would like to have my customers bear in mind that the articles mentioned in this Pure Food and Drug Circular are no trash, but the best grade of goods possible.

Soda Water

Everything about our Fountain is clean and cold.

Everything we serve is absolutely pure. We do not consider the cost of our fruit juices, ice cream or other supplies, but only the quality.

And quality is what counts with you. You do not care whether we pay 60c a gallon for fruit syrup or \$3.00 per gallon, just so you get the very purest and best for your dime.

And we are experts in knowing what is pure.

Everybody likes our Soda and Ice Cream, because we know how to serve it right.

Of course we cannot serve a pure drink with pure ice cream for less than 10c and people don't expect it; but you actually get 20c worth of goodness here for 10c.

So remember—

Nothing but pure cold ice cream soda at Smith's.

CHAPTER XXIII.

During the past few years, we have had numerous occasions to note the value of courtesy; also the loss occasioned by not being courteous.

Courtesy, that is, real genuine courtesy and not mere politeness, is an advertising asset which has more drawing power than printer's ink.

It is a business asset that draws a high rate of interest and it is worth while cultivating.

Courtesy.

A cold-blooded definition of courtesy in a business sense is the simple habit of placing yourself in your customer's position and giving due consideration to his wants, his ideas and his feelings.

While we may be compelled in this hustling, bustling age to be more direct and more self-assertive than we were formerly, we must never forget certain social qualities in business.

Two of these are "sincerity of thought" and "kindliness of action," and they tend to make our manner and behavior towards our customers, frank, manly and straightforward.

Study this habit of courtesy the same as you would your chemistry, botany or arithmetic—of course, it is much easier learned or acquired than those sciences, but it must be studied nevertheless.

Watch the effects of your first attempts at courtesy closely and be quick to realize the fact when you are saying the wrong thing at the right time, or the right thing at the wrong time.

Who Gets the Trade?

It is the pleasant man, the fair man, the man whose manners speak "self-respect" and an appreciation of the desires of his customers, who is remembered, always spoken well of and sought again. He is the man who gets the trade. This then is the whole secret of success in business—a secret that has no exceptions, a secret that is a hard taskmaster to those who know it not and a slave to those who can apply it.

Just think of what this means—the simple act of being courteous is the key to business success.

If you will listen and observe (playing the detective for a while) the manner in which women comment on their purchases; if you will analyze the ways of clerks and customers in other stores, you will have the value of courtesy almost forced upon you.

You will find that when you have the courteous clerks picked out, that the service given and the treatment received often amounts to more than the quality and price of the article purchased.

The Personal Element.

It is the nice girl at this counter; the lady who knows all the latest wrinkles about her goods at a certain store; the curly headed clerk who is so willing to assist you in your purchases; the man who takes real pleasure in showing goods.

These are the clerks, or the salesmen, who prove that courtesy is a trade winning proposition—in fact, it is the only trade-drawing proposition worth having now-a-days.

Two times two are four and nothing else; this is an inviolable rule of mathematics. $\text{NaH O} + \text{H Cl} = \text{Na Cl} + \text{H}_2\text{O}$; this is a definite chemical process that is unalterable. The seed of a dandelion to-day will produce an exact duplicate of the dandelion next year. These are stubborn facts that you cannot disprove.

In the same manner by adding courtesy to customers to the quality of your goods you produce sales, good will and business success; this is also an absolute, definite and stubborn fact that no one can disprove; and moreover, nothing else will produce business success, any more than two times two produces aught but four.

Discourtesy a Losing Game.

A discourteous person, whether clerk or employer, is always a loser, any way you look at it. It works the same as an unbecoming appearance. Your customers will stand it as long as they have to, but at the very first opportunity they will transfer their patronage to some other store.

This is one reason why so many new stores do a thriving business right from

the start. They needs must be courteous to secure their trade from other stores.

They realize that courtesy is the great business-getter, whereas their old competitors have forgotten courtesy and are in a rut.

If all the waste, failures of plans and projects going on daily, through poor service, non-dependence of salesmen and other forms of discourtesy, could be put into dollars and cents, the sum would be enormous.

So great is it, that if discourtesy did not exist and the consequent good effects were equally distributed, it would make every retail druggist in our country independent in a few years' time.

Such is the power and money value of courtesy.

CHAPTER XXIV.

You have often heard the expression, "when he gets his second wind," meaning, for instance, in a race, that when the first feeling of weariness from a hurry-up start has worn off, the person settles down to a steady grind and shows wonderful powers of endurance.

So it is with the science of advertising and salesmanship. When the first wearisome and possibly unsuccessful attempt is over with, it is then that the real successful advertiser, the real merchant, gets down to a steady grind. He then gets his second wind.

Salesmanship.

Salesmanship is a practical demonstration of courtesy; courtesy gets the customers, while salesmanship gets the dollars.

Your opportunities as a salesman manifest themselves in so many different ways that it is extremely difficult to lay down any hard and fast rules.

However, if you are at a loss as to what to say in an apparently difficult sale and where the chance is greatly in favor of losing the customer, just think of politeness and courtesy and forget the sale for about ten seconds.

This will successfully tide you over any nervousness or crankiness that you

are liable to become afflicted with in such cases and, generally, it is the means of clinching the sale.

Salesmanship begins the moment a customer enters the door and your first duty is to bid him the time of day, calling him by name if you know it.

You should learn people's names as rapidly as possible, as it is of great assistance in putting your customers at ease, and this little trait alone will make you scores of friends.

Each customer must be waited upon according to his ideas and tastes, not yours. You must get out of the habit of treating all customers according to a certain indifferent and stereotyped way. Be original with every customer.

You have possibly heard these salesmanship arguments a hundred times and still you are no salesman. Why? Simply because you did not realize that from treating your customers courteously you derive your bread and butter.

People don't know as much about your goods and your business as you

A Square Deal

☐ We believe in giving every one a square deal—every one gets the same grade of goods here, because we have only one grade, and that the very highest.

☐ For instance, we have just received six dozen of the well known

Tonica Hair Brushes

that we are retailing at 75c a piece. We have assured ourselves that this brush is without a superior and, therefore, we recommend it to you. It is a square Hair Brush deal

For 75 Cents

Your Druggists,

Smith & Blank

do yourself, therefore you must expect queer and possibly, to you, foolish questions.

An Example.

When you go into a shoe store to buy a pair of shoes, a clerk comes to you and asks you to be seated. After various remarks about style, size, etc., this clerk tells you that you ought to know that this kind of a shoe is best for you or that this kind of leather is the best, etc.

He disregards any statements you might make, remains persistent, and you mentally feel he is trying to sell you something you really don't want, and you "get sore."

He may be perfectly honest, the shoes may be just what you need, but his manner has offended you, because he was neither diplomatic nor courteous, and you vow you will never go there again.

You know this to be true, for it has happened to you, if not in a shoe store and in the purchase of shoes, then somewhere else and in the purchase of some other article, but the impression it has left on your mind is permanent. Now just imagine how many customers you may have lost by this identical process, for when customers came into your store they are just as easily offended as you are when you are a customer in some other man's store.

This is where the old saying comes from, "you can catch more flies with honey than you can with vinegar."

A pharmacist or any merchant must needs use tact, courtesy and diplomacy in business if he wants to succeed, and if he is not capable of doing so, he has no right to be in business, as he is simply courting disaster.

He will certainly be a failure, either a complete failure or a comparative failure; this is a business law that is unalterable.

Only One Way to Succeed.

You are in business primarily to make money, so go at it in the **only proper way**. You must learn what this proper way is or you will be forever handicapped and simply playing with fate, and fate is often unkind to those who play with her, as the many failures and bankruptcies show.

If you have been negligent of your customers' wishes and desires in the past, turn over a new leaf and treat them nicely, try to please them and see if you don't soon hear different reports about your store.

This applies to every store, in city or country, with or without competition, and is in perfect harmony with the idea of "getting your second wind." Try it.

CHAPTER XXV.

Many pharmacists are of the opinion that the important object to be gained in advertising is to let the public know that they keep certain articles for sale.

They overlook the fact that a description of an article makes it much more purchasable; it leads to the belief that the article has just a little more merit than would otherwise be the case.

The following two advertisements will illustrate this clearly—which one would you use in your newspaper or in any advertising you sent out?

These two sample advertisements tell a story, a great secret, in fact they illustrate as probably nothing else can, the real value of advertising, that is, comparative value.

In looking through hundreds and hundreds of weekly newspapers, the great majority of pharmacists' ads. closely resemble No. 1.

Many of course will appear like No. 2, and the proportion of business is in about the same ratio; 1:2, \$1 to \$2, in favor of the live advertiser.

Now instead of advertising ten different subjects in an ad. that is changed probably once in three months, possibly once in six months, don't you see that you are bound to get better results by talking about one distinct subject every week and another one the next week and so on.

Now going one step further, when one article is advertised, people are impressed by a more or less minute description.

The reasoning is somewhat as follows: Every woman who reads the perfume ad. may not want perfumes,

but they do like to read the description, otherwise half the fashion journals would cease to exist.

If she does want perfumes, and has been using one particular kind for years, possibly hard to get, she may say to herself: "Well, now if Blank keeps 'Heather Bloom,' he is likely to have my kind, and I'll go there and see anyway."

At any rate you will have calls for Heather Bloom perfume, which otherwise you would not have had. So you see that specializing and describing is the great drawing factor in an adver-

No. 1.

For Pure
Drugs, Medicines, Toilet Articles,
Rubber Goods, Fine Chemicals,
Patent Medicines, Soaps,
Perfumery, Trusses,
Candy,
Paints, Wall Paper and Brushes,
of every description
go to

BLANK, THE DRUGGIST

Prescriptions compounded carefully,
Day or Night.

tisement; it often builds up a reputation with people, before they have really traded with you.

The Main Point in Advertising.

And that is the main point; a good reputation is to a business what a good character is to a person.

There are usually two or more pharmacists in a town, both naturally handling the same class of goods. If you have an especially good article or a good line you will naturally increase sales by talking about it; and per contra, if you have exactly the same line you can make the public believe it is better by fully describing it, either by talking or in your advertisement.

No. 2.

CHOICE PERFUMES

We use great care in selecting our perfumes and as a result we have probably the choicest line in the city.

We buy the best of each manufacturers' make, having some perfumes from California, some from France, others from Italy, and so on.

But among all Good there is a BEST and in our

"Heather Bloom"

we pride ourselves as having the most exquisite and lasting Perfume made.

It has its natural green color, is specially grown and distilled in the famous Heather region of England and costs only 60c an ounce.

Sample free.

Blank, the Druggist

You must always remember that the object of your advertisement is "why should people come to me to spend their money, rather than go elsewhere for the same thing."

You must interest people before they will buy and they cannot become interested until they get a fairly clear idea of what you have for sale; and make your description interesting as well as reliable.

Then you'll win.

CHAPTER XXVI.

How can you make your advertisement interesting? Heretofore you have told your patrons that your goods were first-class, that you were eminently qualified to judge what you offer for sale, and that you had a very complete stock.

You have used your thinking apparatus day and night in making, or trying to make people believe that it was to their advantage to trade with you, etc.

And still you feel that you are not getting as much trade as you ought to. There is still something missing.

The Missing Link.

Did you ever realize the fact that when you have described an article so

seductively that people want it, they imagine that the price of it is beyond their means and the sale is lost—because you forgot to advertise the price.

The most interesting part of your advertisement is the price of that which you wish to sell. Few people, less than 10 per cent, are able to judge the price from looks and descriptions.

The price gives your customers a chance to compare values and a chance to figure on the possibility of buying; and besides, it begets a feeling in the customer's mind that price and quality harmonize.

Formerly the retail druggist imagined that as soon as a price was mentioned, the sale would be handicapped.

Besides, it used to be customary that when a price was attached it **had to be a LOW price** in order to sell the article.

This theory, happily, is exploded, but the results of it are still apparent in our cut-rate establishments and in five and ten-cent sales.

It pays to tell things, not in superfluous words or circus language, but just a short, plain, sensible, honest statement of important things.

Boomerang Effects.

You may want to advertise a thing, but as it is high priced, you reason that folks think it is too dear and that they will not come near your store at all, if you mention the price.

You imagine that it will be time enough to tell the price of an article when people call for it and you can better explain its good features. But before they come you have already defeated your own purpose, because they will not come, believing the article too dear, or they are afraid of being tricked.

The great majority of your patrons feel that if your advertised article measures up to your claims and you have advertised the price, they will never hesitate to pay this price, nor will they be suspicious of your intentions.

The reader of your advertisement wants to know the price; he wants it

right along with a description of the article.

Two Kinds of High Prices.

If your price is too high, you must lower it. If it only **seems** too high, you must word your advertisement so that the price will **seem** reasonable.

You must reason that people expect to pay high prices for high-class wares. The ordinary retail pharmacist caters to all classes of people; therefore it is poor policy to advertise high-class goods all the time.

You have, for instance, three grades of fountain syringes and this is eminently proper. One kind sells at 75c, another at \$1.00 and \$1.25, and the high-priced ones from \$1.50 up.

Hence when you advertise syringes, plan your ad. on the following outline:

This will give your different classes of trade a proper choice, one over which there will be no quibbling.

A policy such as this will bring solid custom and keep you out of the ranks

EVERY FAMILY

needs a good fountain syringe some time. You can always find a suitable one in our complete stock.

Every one of our syringes has a reputation, and we will replace any proving defective within one year from date of purchase, except those costing less than one dollar.

The Jumbo Syringe, black, white or maroon:

Two Quart size, any color.....\$0.65

Three Quart size, any color..... .75

Four Quart size, maroon only..... .90

The Daisy Syringe, white or maroon:

Two Quart size.....\$1.00

Three Quart size..... 1.15

Four Quart size..... 1.25

A very strong, durable syringe; guaranteed.

The "Very Best" Syringe, white, black or maroon:

Two Quart size.....\$1.50

Three Quart size..... 1.65

Four Quart size..... 1.75

Every one perfect and the best made.

Each of the above Syringes is worth the price.

GREEN & WHITE, Druggists

of the "high priced," "cheap John," or "prevaricator" class of merchants.

CHAPTER XXVII.

With the purpose of placing some good information in the hands of the public in regard to the needs of a family physician, and to do away

with some of the sales of the objectionable nostrums (erroneously called patent medicines), the following article will, we believe, make good reading matter for a neat little circular or folder.

The article may be headed as here given, or "Why Should I have a Family Physician," "The Value of a Good Physician," or "Why Are So Many People Chronically Sick," etc.

This sort of advertising to your customers is in direct co-operation with the U. S. P. and N. F. propaganda work and is bound to make loyal friends of your physicians.

THE EVILS OF SELF-MEDICATION.

Why are the American people "chronically sick?" Because, as a people, we like to be humbugged.

Not that other civilized nations are blessed with healthy citizens only, or that they *can't* be humbugged. It is a fact, however, that other nations have a smaller percentage of "chronically sick" people than we have, owing, no doubt, in a large measure to the fact that the government of these nations practically forbids its citizens to "dose themselves with medicines."

The object of this article is to attempt to show the people of this country that their own blind belief in the claims of any and all fakirs is their own greatest and most dreaded enemy.

People Must Co-Operate.

When you are ready for a new house, do you plan and build it yourself? Of course not, because you do not know how. You consult an architect or a carpenter who has made this his life study, you pay him his price, and he does it for you.

Again, when your teeth are beginning to get "bad" and you are in danger of losing their great usefulness, what do you do? You don't fill them yourself, that their value may still be yours, for you cannot—but you go to a first-class dentist and you pay him for his most excellent service.

To illustrate still further, when you are about to undertake a long journey, do you pack up your necessities for it and start out on foot? No, you are unequal to the task and, furthermore, your time will not admit of it. Even here someone comes to your rescue, and the modern passenger train swiftly carries you to your destination for a certain specified price.

Illustrations by the hundred could be cited to prove to every man and woman in this country how we have grown to be a nation of people who realize that co-operation with others produces harmony, contentment, education and all the qualities that go to make life worth living, with one

exception, namely: **when you are sick; then you are going to try to cure yourself, the most difficult work of all.**

You might worry along in a house of your own construction, you may do without a few teeth, you probably could make your journey on foot, you may educate your children yourself after a fashion—but, you cannot cure yourself of a disease of which you know absolutely nothing, and because you are trying to do so, you, with others, have made this a nation of "chronically sick" people.

Hundreds, yes thousands, of our best physicians are studying every day how to combat disease and sickness; thousands of druggists are studying every day how to make medicines more exact and certain; and still both the physician and the druggist have much to learn.

But you, who have never studied medicine, who have never studied the human anatomy, who have never studied the method of preparing medicine, you are willing to take chances with yourself in an attempt to cure your ailment.

You read in the paper that a certain "fake medicine" is made by some wonderful old Indian secret, you read the fine testimonials and you see in that advertisement just what ails you, (pains here, aches there, etc.), so it must be so, **for the paper says so**, and you swallow the bait, hook and all; that is, you buy the stuff and take it.

Taking Chances.

You know absolutely nothing of what ails you, you know less of what you are buying, but you are willing to take a chance.

But the trouble is you are not satisfied with one chance. The first kind may not help you, then you take another advertised kind, but strange as it may seem, a second failure does not discourage you and you try still another kind, and possibly many more.

You assure yourself with the mistaken belief that you will hit it sometime, and thus save the doctor's and also the druggist's fee.

But while you are thus experimenting with yourself from month to month, and possibly from year to year, how about your disease?

Disease is never idle or motionless; it either improves or it gets worse.

It may be that you do not realize it, but your disease, if not properly treated, is getting worse, and the longer you treat it improperly, the worse it gets, till finally it is chronic or incurable. And that is the condition in which hundreds of thousands of American people find themselves in today.

And why?

Simply because they have taken liberties with the most difficult and deepest scientific study of the present time, medicine.

It may be thoughtlessness, it may be indifference, it may be carelessness or it may be something else, but you have thought that you knew more about your sickness than the doctor, so you believed the newspaper statement of a smart fake medicine advertiser and paid him your money.

A New Form of Patent Medicine.

Lately a more sneaking form of this newspaper medicine has come into vogue, and the advertisements, cleverly worded in various ways, ask you to buy several well known ingredients at the drug store, but one of the ingredients **always** is a secret medicine or a nostrum, as any druggist will tell you, and which generally always costs an extra 50c.

Another thing liable to lead you astray is the phrase now appearing on all packages of patent medicine: "Guaranteed under the Food and Drugs Act, June 30, 1906."

This **does not** mean that the Federal Government guarantees the quality, purity or composition of the contents,—**never! Nothing of the kind.**

It means that the article merely conforms to certain requirements of the Food and Drug Law.

Your Duty.

Now what you should do when you are sick or diseased and in need of medical treatment is to go to a thoroughly conscientious physician and put yourself in his care.

He will find out for you what the trouble is if anybody can, and if medicine is needed, he will write out a prescription for what he wants you to take, and then you should have that prescription filled at a first-class drug store.

The first cost of such a proceeding may be more than your first bottle of patent medicine, but your chance for a cure is a hundred fold greater, and in the end it will be the cheapest thing for you to do.

You, in common with many other people, will think it strange that a physician must write a prescription and a druggist must fill it, thinking one person could and should do both, thereby saving you unnecessary expense.

Well, many physicians today are doing that very thing and their want of success, as a rule, should be answer enough for you that such is not the kind of physician you want.

The best reason why a physician should not make nor dispense his own medicine, and why a druggist should not prescribe for you, is because the knowledge necessary for the complete understanding of these two professions, medicine and pharmacy, is greater than is ordinarily possessed by one man.

So we come back to our first statement, co-operation. If you would have your

disease treated right and with skill, let the physician do it for you and let a first-class pharmacist make your medicine.

This is absolutely necessary if you do not want to run the risk of becoming a "chronically sick" person.

CHAPTER XXVIII.

The fall of the year is the time when our wives and other men's wives will be busy "pickling." From a general awakening among pharmacists to get what is theirs in a business way, the sale of spices has become an important adjunct to the druggists' activities.

In chapter XXII appeared the outline of an exceptionally good booklet, and it would be a most novel and enterprising undertaking for all pharmacists to get out a similar booklet within the next four or five weeks, and then emphasize it with a good window display.

Why Seek Spice Trade.

In preparing this display, try and outdo yourself. Do better than you have **ever** done before. The results will warrant you in going to some little expense, for this trade is worth much to you.

Do not let false modesty prevent you from going after this desirable trade with a vim. This trade belongs to the druggist and to no one else. But you can't get it unless you go after it.

Never mind what grocers or competitors may think. They do not pay your expenses, neither do they put money in the bank for you. You must do it yourself.

The color of the floor of the window should preferably be white, either white oilcloth, white muslin or cambric cloth would be suitable.

The display should include all the spices used, in bulk and in packages. Ordinary saucers, fancy bottles and glass jars should be used in the display to make it as artistic as possible.

The display should be emphasized by placing a jar each of preserved apples, cherries, plums, berries of various kinds, cucumbers, etc., in prominent places in the window with appropriate cards as noted further on.

One main point in making this display is absolute cleanliness. Be sure that the preserved fruits you display "look good enough to eat."

Much will also depend upon the wording of the cards accompanying the display. Do not crowd your window, but leave nearly as much space for the cards as for the display itself.

The cards should be about 5 or 6 inches high and 9 or 10 inches wide, and set on the floor of the window at an angle of 45 deg.

Wording for Cards.

The following are appropriate paragraphs for the cards:

- 1.—Your preserves will look like these if you use our Spices.
- 2.—Compare the Quality of our Spices with the Quality of Others; not the Prices.
- 3.—Our Spices are Absolutely Pure, the flavor perfect.
- 4.—You want the Best Spices, not the cheapest.
- 5.—Your Preserves will keep Better if you use our Pure Spices.
- 6.—Our Dill Seed makes the finest pickles.
- 7.—We know this Cinnamon is pure.
- 8.—As our Spices go farther than inferior kinds, they are the cheapest in the end.
- 9.—Common Pepper contains as high as 70 per cent adulteration; that's why it's cheap.
- 10.—The Best Spices are none too good for my customers.
- 11.—For convenience, my Spices are put up in one and two-ounce tin boxes.
- 12.—You cannot buy pure Spices at the price of the cheap kind.

A Fine Chance for Druggists.

The druggist has most effective talking points on spices, flavoring extracts and such articles as belong to this class, in the Pure Food and Drug Laws.

The gross adulterations found in spices had much to do with the passage of the National Law, and this fact should be worked into your advertising at every favorable opportunity.

Therefore the present time is a peculiarly appropriate one to bring the

merits of your spices before the public, and also the fact that you as a pharmacist are the logical and natural distributor of these products.

Too much cannot be said in favor of the 8-page "Pure Food" Booklet, as mentioned above. This should be printed on a fine quality of enameled paper, in the best art at a good printer's command, and circulated every three months in your community. Call the booklet "Smith's Pure Food and Drug Bulletin," "Smith's, Pure Spices and Flavors," or any other appropriate title (your own name in place of Smith).

Good Reading.

Some valuable paragraphs to insert in the booklet are as follows:

"Every Spice that we offer for sale is a drug, and has been used from time immemorial as a medicine. These spices are valuable drugs, too, and as every one of our drugs is absolutely pure, our spices must be pure, also.

"Of course, they cost a little more than common spices, but is it not more important to use absolutely pure spices in your food than to save a few cents by buying the inferior kinds? You gain nothing by buying cheap spices, as you must use more of them; and, besides, you do not get that real, genuine 'spicy' flavor you get from a pure article."

Spices Always a Quality Argument.

Druggists should realize that a good spice business is of more value to them than the profits on the sales would seem to indicate.

It has a more far-reaching effect, as it assists in producing that "quality" feeling in the minds of your customers which you should be striving hard to create, and which is the foundation of every successful pharmacist's career.

CHAPTER XXIX.

How the little things do count. When it is remembered that the average pharmacist sends out between 100 and 400 packages each day, it is cause for wonder why these packages are not made an excellent advertising medium by means of inserts.

It may not be as effective in all instances as newspaper advertising and the sending of circulars by mail, but its effects are really remarkable.

It amounts in results to fully as much as a similar number of circulars mailed **each day**, and the expense is decreased by the cost of the postage, envelopes and addressing.

Every one is sure to go where it will be seen and read, and then, naturally, it is up to the contents of the circular

WE THANK YOU

for your patronage. Our aim is to please every customer who enters our doors.

☐ If the purchase just made is not perfectly satisfactory upon a closer examination at home, we will be pleased to exchange it or refund the price.

☐ We make exceptions to this rule in the case of rubber goods and similar articles, for sanitary reasons only, however.

☐ We mean just what we say and will **SATISFY** our customers at all hazards.

☐ We can't afford to do different.

**BLANK & BOWSER
DRUGGISTS**

to become an effective advertising medium.

The Principle of the Insert.

The basic principle underlying this scheme is in the making of better customers from those who trade with you, and results prove that every well satisfied customer is a word-of-mouth advertiser for your store, the best form of advertising known.

To make this plan effective it is necessary that all parcels leaving your store be neat ones, as people generally are proud of a neat parcel, and it re-

Are Your Feet Tired?

☐ Do you sometimes think that your feet must drop off, they feel so heavy?

☐ It gets you "on edge" and you become nervous and irritable and too tired to walk or do anything.

☐ This is because your feet are closed up and imprisoned in shoes all day long and the movement of your foot is not free enough.

☐ By sprinkling some of our "Special Brand" Talcum Powder in both shoes and stockings, the cause of this tired feeling is removed at once and you feel your own self.

☐ Large cans 25 cents, at

**BLANK & BOWSER
DRUGGISTS**

flects favorably upon the store which sends it out.

This is a little thing, but the modern pharmacist is thoroughly alive to the fact that **only by proper attention to all "little things"** can he hope for any big business.

Paradoxical as it may seem, good wrapping paper and good twine are cheaper than cheap twine and flimsy paper, because in nearly every instance more of the cheap paper is necessary in wrapping up a parcel than would be necessary if a better grade were used.

Good paper also makes a nicer package; it looks neater and more business-like and is an added argument that yours is a quality store.

Good paper, good twine, a compact and firmly tied parcel and the right sort of an insert—these will make this plan effective.

Inexpensive Advertising.

These inserts are changed as occasions demand and, as they are printed in quantities, the price can be made very satisfactory.

A Word to our Friends

This is a season when there are apt to be sudden and serious ailments. It is a time, too, when climatic conditions often retard recovery.

If you or any member of your family should be so unfortunate as to be attacked by illness, we are ready to do our part towards helping you to restore health quickly.

We take no vacations. Our store is always ready and always equipped to meet any emergency.

Our prescription department especially deserves consideration when there are medicines to be prepared, because we have spared no efforts to maintain the highest scientific standards in it. This department can give you service that cannot be excelled anywhere.

Our stock of prescription drugs is fully abreast of the very latest scientific requirements, the compounding is done by registered pharmacists of ample experience and all our methods are up-to-date.

Have your physician leave the prescription with us and we will promptly deliver the finished medicine. There is no charge for such service and our charges for prescription work are as low as can be had anywhere.

Sincerely yours,

L. L. Elgin, Druggist,

Hopkinsville Member Pure Drug
Association of America.

A different one can be used each week and a quantity should be folded that they may be ready for insertion in the smaller parcels.

As samples of these inserts, the ones inserted in the text of this article can be used, although any pharmacist will find hundreds of subjects to write about.

Many pharmacists use an insert of a size that can also be inserted in an envelope and which is printed on both sides, one of the sides always containing wording similar to the illustration herewith, headed "We Thank You."

Let no pharmacist underestimate the value of this "package insert" form of advertising. The inserts are read when the customer is most easily influenced. He has shown his confidence

in you by buying from you, and that is the time to drive an entering wedge for future trade and to make what you already have more secure.

CHAPTER XXX.

To continue with the subject of package inserts mentioned in the previous chapter:

The cost is conspicuously low and the results achieved are out of all proportion to the effort made.

An economical way of getting out these inserts is to prepare copy for twelve of them and have them all

Tooth Brushes

You can get more genuine satisfaction out of a good tooth-brush that's made right than you can out of a dozen ordinary ones.

A great many tooth-brushes are simply made to sell; they look nice, but that's all the merit they possess.

We use as much care in selecting our tooth-brushes as we do in selecting all our articles of merchandise.

We want the best and you cannot afford to buy anything but the best; it is the cheapest in the end.

Our 30c tooth-brushes are perfect and every one is guaranteed.

We have them from 10c up to 75c.

We are in business for your health.

PIX & STIX, Druggists

printed at once. This will save a large amount of labor at the printer's and will reduce the cost to the minimum.

Use a different insert each day for twelve days, and then repeat for the next twelve days. Or, copy for fifteen inserts may be prepared which, when repeated once, will bring you to the end of one month.

It would be policy to prepare fifteen new ones each month, thus giving you 180 different inserts in the course of a year.

This is a most excellent method of bringing every department of your store to your patrons' attention, and it is done in an inexpensive manner, without loss of time and very little effort.

Protection

There is nothing too good for any member of your family when he is sick.

In fact, as far as medicines are concerned, none but the very best should ever be given to a sick person.

If people would follow this advice strictly and to the letter, there would not be so much sickness, neither would it cost so much to be cured.

Every one of our medicines is absolutely pure, full strength and is made right, because we make and test it ourselves.

You want our medicine and service when you are sick.

We are in business for your health.

PIX & STIX, Druggists

Besides, your advertising is reaching just the people you want to reach and at a time when it will do the greatest amount of good.

This method of publicity makes your customers "solid" with you; it makes them permanent, and you need to worry but very little about new custom, although it is your plain duty to get as much of it as you can take care of properly.

Your old, permanent and satisfied patrons can influence more new customers to trade with you than all your advertising will ever result in.

Therefore make your efforts in the direction indicated, and as well make your present customers permanent ones, for a customer who is satisfied with the goods and the treatment you offer him, will take great pride in relating your good points at every opportunity.

Let others advertise you, and let others work for you, by making trading at your store so pleasant for them that they are compelled to advertise you to their friends. That's the best way to create new business.

There are few drug stores in the United States but what can increase their business 50 per cent the first year, by the judicious use of the inserts above mentioned.

In preparing copy for these inserts,

A HOUSEHOLD NECESSITY

Almost every family needs a good Cough Syrup during the winter.

You have doubtless had many unpleasant and expensive experiences in the past because a good cough syrup was not on hand at the beginning of a cough.

Avoid this in the future by getting a bottle of **JONES' TOLU COUGH SYRUP** now, for 50c.

And take it at the very first sign of a cough.

A few doses are all that is necessary.

A bottle will **PROTECT** your family all winter.

Prevention is easier than cure.

WE ARE IN BUSINESS FOR YOUR HEALTH.

PIX & STIX, Druggists

keep this one important maxim before you, **all the time**: "I WANT TO CREATE A DEMAND FOR THIS ARTICLE."

Advertise only one article on an insert. You have 180 different ones to advertise in the course of a year, so make the dose each time as effective as possible.

As illustrating the amount of matter sufficient for an insert, those shown herewith may be taken as examples.

CHAPTER XXXI.

There have been many ways and means advanced for curtailing the mail-order houses' encroachment upon retail business activities.

There are, however, a great number of manufacturing firms scattered over the country which are doing a large business and getting a considerable share of the druggist's business in sundries, etc., factors that are given little if any consideration and thought.

We have reference to the numerous advertisers in the monthly and weekly magazines, many of whom seek trade direct from the public.

New Fields of Endeavor.

Some of these advertisers spend thousands of dollars yearly in magazine advertising and it pays them handsomely or they would not spend the money.

Many advertisers do not seek direct trade, but simply advertise a specialty or a line of goods and rely upon the retail merchant to supply the demand.

Others seek trade direct from the consumer and they get it too, because the ads are a definite and direct appeal, not only to the pocket book, but also to the reader's ideas of quality, beauty, usefulness, etc.

For instance, you will find advertised paints and varnishes, kodaks and cameras, eye glasses, candies, baby foods, mineral waters, perfumes, soaps, safety razors, razor strops, etc.

Besides being patterns of good advertising copy, which can often be successfully used as models by the retailer, the goods advertised should find a place in your stock of sundries, whenever it can be done consistently and when the price is right.

How to Get This Trade.

To get your share of this trade, however, it becomes necessary to let your customers know that you have these goods for sale and you should at times make special efforts in this direction.

Trade does not "belong" to anybody.

The one who gets it owns it as long as he can sell goods to it and no longer. The pharmacist, as a retail merchant, can get closer to his trade than any manufacturer.

A very successful way of getting a share of this trade is by means of a typewritten letter in which you call attention to the fact that your stock of sundries is very complete, mentioning the advertised article specially, and inviting your customers to inspect your stock.

By so doing, they will very often find in your store just those articles they would otherwise send for by mail and which often occasions much delay. Dealing with you they could always be assured of getting the goods in satisfactory condition, no freight or express to pay, and they could inspect the goods before purchasing, etc.

If for some reason a typewritten letter cannot be used, newspaper advertising or inserts could be employed very effectively.

But you must let people know, by some means, that you carry the advertised goods, for somebody is going to sell them.

A "Live-Wire" Connecting Link.

Such a national advertising campaign as the magazine advertisers are undertaking should be backed up by your local advertising as a connecting link in order that **you** may get the full benefit of it and **your** share of it. Don't let your own-make and non-secret ideas carry you off your feet, but preserve the proper balance and reap your share of the benefits all along the line.

Many of these houses would gladly co-operate with the druggist if given an opportunity to do so, by furnishing electrotypes free, to be used with advertising copy.

Although much has been written upon the value of inserts, in the shape of small counter slips, envelope or package inserts, three or four inches wide by six long, it seems to be the opinion of many successful pharmacists that this is a most excellent way of advertising.

The Valuable "Insert."

Considerable has been written on these inserts in previous chapters of this book and the subject is one that should have the careful and considerate attention of all pharmacists. It pays.

OLIVE OIL

Sometimes called Sweet Oil, is now extensively used as a medicine, but only the genuine has any proper effect. The principal source of supply is from southern Europe, the best grades coming from France and there is also a good California Oil on the market. Olive Oil was formerly very much adulterated, the better grades being mixed with inferior qualities, but under the Pure Food and Drugs Law, all brands sold must be labelled just what they are. A simple test for Olive Oil is to place a small bottle full in a cold place (an ice box) over night, when genuine Olive Oil will give a white flocculent deposit, more or less heavy, according to its purity, and which disappears on heating. You will find the best kind of Olive Oil at

DR. GEO. J. WARD,

Druggist and Pharmacist.

St. Clair, Mich.

Dr. Geo. J. Ward, druggist at St. Clair, Mich., has made excellent use of the insert form of advertising, a sample of which is reproduced herewith.

CHAPTER XXXII.

There is one feature in general advertising that is overlooked by a good many druggists. It seems that many have the impression that as theirs is the only store in town and everybody knows them, it would be useless to advertise because if any one wanted anything in their line, he or she would come to them anyway.

The Negative Factor in Business.

It is this one individual factor, more than all the others put together, that is robbing the druggist of many, many sales. It is the one and only method by means of which he stays in the "supplying the demand" class of merchants.

If any person really wants anything in your line and knows that you are the only merchant in town who keeps it, or ought to keep it, he will certainly come to your store for it—if he does not send away to a mail-order house for it. If you have the article called for, you will "supply the demand" and then wait for the next customer.

In this way no druggist can hope to secure more than half of the trade that really belongs to him, for the simple reason that he has competition on every side of him.

And even if this competition did no advertising, it would not make a particle of difference in the results, because so many of your "possible" customers would just as readily go to your competitors as come to trade with you. And why should they not? Why should they come to you?

An Illustration.

To illustrate more definitely, suppose Mrs. Smith **wants** a fountain syringe and wants it badly. She would hurry to your store and get it, of course.

Now supposing again that Mrs. Smith **may** want a fountain syringe. She has often thought she would get one, she has often needed it, but some-

how she has managed to worry along without it. In such a condition, in such a state of mind as this represents, you find a great many people. In fact, the majority of people do not really apprehend that they want certain articles.

It is this class of people that the druggist should get after. To these people you cannot "supply a demand," for no demand exists, **but you must create the demand.**

When Mrs. Smith **may** want a fountain syringe, there is only one way to sell it to her and that way is this: You must be instrumental in some way in letting Mrs. Smith know you have fountain syringes for sale, and that she really requires one.

And while you are at it, you might just as well make assurance doubly sure by stating in your advertisement the various kinds you have, the quality, the price, etc., and, above all, the necessity for having it in the house all the time.

The Psychological Moment.

In situations like these is where advertising counts, and such situations create many opportunities, for if Mrs. Smith should happen to be in a department store some time where syringes are displayed, and she has the money with her, nine times out of ten she is going to buy, for to her the psychological moment has arrived when she **must** have that long-desired syringe.

Again, a peddler may come to Mrs. Smith's home and, among other things, displays a syringe and the chances are that Mrs. Smith will buy.

What is true of syringes is equally true of toilet preparations, soaps, perfumes, peddler's medicines and numerous other similar articles that belong to the druggist's stock of salable merchandise.

In the art of "creating a demand" is illustrated all that is worth while in advertising. You should never be satisfied to take advantage of such demand as already half exists, as is the case in the above Mrs. Smith, but you should even attempt to create new demands that never existed.

This may at first appear a difficult task, but a moment's reflection will convince you that it is not. A few years ago comparatively few people wanted soda water. Only a short time ago common tooth powder was the only thing sold. Look at the consumption of fountain beverages today. Realize the magnificent line of fancy boxed tooth pastes are on the market at the present time.

The demand for antitoxin is only a recent one, and hundreds of similar instances could be mentioned, not only in our profession but in all fields of endeavor.

All progress is made by the constant desire to "create a demand" for something, and if that something is meritorious it is a winner, and it sells. Otherwise it is a failure.

In our own profession, probably nothing can better illustrate the great value of "creating a demand" advertising than the method pursued by the N. A. R. D. at the present time in creating a demand for U. S. P. and N. F. preparations.

Of such benefit is this advertising, and withal, so powerful a help is it proving to be, that it bids fair to revolutionize the profession of pharmacy in a few years. Why? Simply because this advertising has "created a demand" among physicians for better medicines (where a small demand only half-existed before), and because the N. A. R. D. has gained the confidence of the physicians by being frank and sincere in its methods, as well as earnest and thorough in its work.

The whole meat of advertising is therefore in creating a demand, and by your honesty and thoroughness proving to your patrons that you can be trusted with their trade.

The method pursued is a secondary consideration, and can take the form of window advertising, the newspaper ads., letters, good circulars, booklets, package inserts, etc. The principal consideration is quality goods and good, sensible and truthful advertising copy.

With these in good working order, you can well afford to laugh at hard

times, competition and pessimism generally. Try it.

CHAPTER XXXIII.

There are thousands of druggists in our country who are located in the smaller cities and villages and who have the only drug store in town. The greatest competition these druggists have is the medicine peddler and the general store. The medicine peddler sells medicines and flavoring extracts, and so does the general store proprietor.

If the druggist in such localities will take a few studies in the art of diplomacy (which is but another term for personal advertising), he will be in a position to get rid of some of his competition, both the unfair kind and the regular kind.

An Important Move.

In the first place and as being of the greatest importance, a business men's organization should be started for the protection of the town's business. After determining just what you would like to keep out of your town, as regards traveling medicine peddlers, traveling merchants with cheap bankrupt stocks, etc., draw up a petition setting forth your desires and present it to your city or town council.

Make ample preparation before you go to your council, have all your arguments as tax-payers in such shape that they cannot be controverted, and in other ways make your position secure.

In this manner, no doubt an itinerant vending ordinance can be passed that will be absolutely prohibitive, or at least a high license ordinance can be passed that will practically amount to the same thing. Many cities and towns have such ordinances, the merchants in these places sticking together like leeches, and such a municipality has prosperous business men. The placing of such an ordinance on your town's statute books is worth all it costs in time and money.

Work Only Half Done.

With this much accomplished, your work, however, is only half done. You

must now proceed to do some regular advertising to every family in your territory, and let the people know in positive terms that you are able to supply them with quality medicine, flavoring extracts, etc.

In this manner you will supply the "missing link" to such families who have depended, more or less, upon the traveling peddlers for their supplies in the past. There is no better business-builder than advertising, much or little, according to your purse, but let it be steady, persistent advertising, for that is what counts.

A More Difficult Proposition.

With the general storekeeper, however, other diplomatic methods must be pursued. He buys proprietary medicines, flavoring extracts, drugs and toilet articles from such firms as, for instance, the Chamberlain Medicine Company at Des Moines, Iowa, and no matter what the quality of these goods, he is the keenest kind of competition. It is rather difficult to instruct in regard to this class of competition, as each particular case requires individual attention, but it should, therefore, be none the less your duty to see how much you can accomplish in the way of reducing the competition.

Your plans should all be on a "give and take" basis; if you sell certain things in the sundry line (merchandise) that he also sells, exchange with him for his proprietary medicines, drugs, flavoring extracts, etc., and be "a good fellow." Your arguments must fit the man and the occasion, you must be aggressive, but never quarrelsome, and always have in mind the good of both parties, besides the good of your town, at heart, in such a diplomatic conference.

Practical Diplomacy.

While few general storekeepers will readily or willingly give up a salable line, no arguments should be forgotten that may help your cause. Always have it understood that you are doing well, and at times it may even be advisable to talk in the following strain, especially if your man is "for his town, first, last and all the time":

"I am doing well. I could help the town considerable by doing more business and having a more exclusive drug store, which I can have if you (the general store proprietor) will sell or exchange your patents, stationery, etc., with me.

"A fine drug store gives a certain caste to a town, and should I, by any unfortunate combination of circumstances, move away, it would hurt the town exceedingly, for then the farmers would go to other neighboring towns for any drugs they may need and would naturally do some trading there, too."

The Alternative.

These and similar arguments, discussed in your business men's meeting or elsewhere, will have a most stimulating effect upon the business conditions of your town. Diplomacy and reasoning will do almost everything, and if one attempt does not turn out satisfactory, you must try again, using stronger arguments.

If nobody can see it your way or will not, it simply devolves upon you to put extra efforts into your advertising and thus "compel" people to recognize your ability and capability as a first-class druggist and all that this name implies to your patrons.

There is no set or class of people, city or country, that cannot be made your customers, nor that can withstand for any length of time, a good, honest, above-board, efficient advertising campaign, without becoming very much interested in you.

How Others Advertise.

E. G. Michel, Marble Falls, Tex., prints the following with a printing wheel on the back of all writing tablets, size of the print being $4\frac{1}{2} \times 8\frac{1}{2}$ inches:

"Unless we do our best, we are not doing our duty." Five hours a day instruction is about all one gets in school. Waste this, and it will be hard to get what we want. Add five hours a day and it will be easy to get what we want. Besides fame and wealth, we will want Books, Stationery, Jewelry, Watches, Paints, Wall

Paper, Silver, China and Glass Ware, Holiday Goods, Soda Water, Candy, Kodaks, etc., from E. G. Michel, the Druggist, at Marble Falls, Texas."

The Beaumont Pharmacy (Robert Fulton, Prop.) has this poetic ad, in the Gateway Gazette, Beaumont, Cal.:

WHEN YOU WANT A NICE,
COOL DRINK,
OR SOME PAPER, PENS AND
INK;

WHEN YOU WANT DRUGS
FRESH AND PURE,
COMPOUNDED SO YOU'RE
SECURE;

WHEN YOU WANT SALVES,
PLASTERS, LOTIONS,
POSTAL CARDS OR FANCY
NOTIONS;

CANDIES, SMOKES, OR DIS-
INFECTION,

CREAMS AND POWDER FOR
COMPLEXION,

ALL THESE AND OTHER
THINGS GALORE,

JUST CALL AT ROBERT FUL-
TON'S STORE.

Beaumont Pharmacy

Beaumont,

California

CHAPTER XXXIV.

There are probably few druggists who would not go to some expense to secure a large and permanent trade in toilet articles, especially when they are "own make" goods.

Probably one of the most successful methods to pursue in securing this trade is to offer a collection of toilet articles at a lump sum, making it an introductory offer.

Some of our most successful druggists find that such a course has almost become a necessity, when it is considered that almost every small or large store is beginning to stock toilet articles.

The trade in toilet articles is too profitable for the druggist to permit it to slip away from him, and if he does not bestir himself, it will surely go the way of the flavoring extract trade, the spice and candy trade, etc.

"Create a Demand."

Here, as elsewhere, the one main factor must almost be kept uppermost in the druggist's mind—"creating a demand." The druggist should create a demand for the products of his own skill and from his own laboratory as far as possible, for by so doing he shuts out all unnecessary competition; he gets all the benefits and every Tom, Dick and Harry cannot sell the goods in competition with him.

If his wares are good as they should be and people want them, they will surely come to his place of business to buy them and not go elsewhere, if the proper advances are made by the druggist.

It is suggested therefore that druggists make the most of their exceptional opportunities in the sale of toilet articles, opportunities that no other merchant has, for the druggist has the material and the training required to put up these goods, at a minimum of cost.

A typewritten letter, a circular, or a booklet announcing the introductory offer should be mailed to every present or prospective patron of your store, or space can be found in your drug store paper, if you publish one.

Two pages of copy for an 8-page booklet, of a size suitable for mailing in an ordinary envelope ($3\frac{3}{4} \times 6\frac{1}{4}$), are given herewith and by making the necessary changes to conform with your prices and conditions, should do much towards making your place of business headquarters for toilet articles.

Should you not desire to manufacture some of these articles, select such from among some non-secret or price protected line that it will be to your interest to push.

Page 1 simply contains a catchy title, as "Healthful Beauty," "Toilet Necessities," etc., and on page 8 could be enumerated such articles as Bay Rum, Cold Cream, Witch Hazel, Glycerin, Hair and Tooth Brushes, Camphor Ice, etc. Page 2, containing the offer is illustrated herewith.

Special Introductory Offer

To introduce our well known and popular line of toilet articles in the homes of our patrons, we are making a most introductory liberal offer.

For two dollars we will give you one each of the following excellent toilet preparations:

Hair Tonic, regular price.....	\$0.50
Face Cream, regular price.....	.50
Face Powder, with chamolis.....	.25
Eyebrow Pencil, Blank's .....	.10
Tooth Powder (or paste) .....	.25
Toilet Cream .....	.25
Toilet Soap, 3 cakes and face rag ..	.25
Talcum Powder and chamolis.....	.25
Perfume, La Rose, 1 oz. ....	.50

Total, regular price.....\$2.85

This offer is not in the nature of a cut price, but simply a means of introducing our most excellent preparations.

The offer is good only for the month of December, and only one "offer" will be sold in a family.

Respectfully, Your Druggist,

JOHN BLANK.

15 Main Street, Blankville.

Pages 3, 4, 5, 6 and 7 will contain a short description of the various articles enumerated in the offer, two of each on a page, page 4 being here set up to serve as a guide or sample.

One thing to guard against in pre-

Blank's Heatherbloom Cream

This excellent preparation is composed of pure, harmless and soothing drugs, that will preserve the beauty of any complexion. It is nicely perfumed with the perfume of Heatherbloom buds and flowers.

Always Satisfies.

We have made it for 17 years and it has always given satisfaction.

It is an insurance against the effects of raw and cold winds on your complexion.

Full directions accompany each bottle.

Price 25c per large bottle, guaranteed.

Blank's Tooth Powder

Everybody likes our Tooth Powder. It is as white and pure as snow and free from any grittiness.

It has a most agreeable taste and every possible care is taken in its manufacture to make this powder perfect.

None Better.

We do not think it can be improved upon and offer it to our customers as the best tooth powder that can be made. The price is right. A large patent-top can for 25c.

paring copy for such a booklet is the too frequent repetition of superlative adjectives, such as "excellent," "finest," etc. Be moderate in your statements and make them come as close as possible to the truth.

CHAPTER XXXV.

So many new, novel and practical methods of advertising have appeared in these chapters up to this time and which all more or less have used the show window or printer's ink as a basis of operations, that a departure from these methods for once may be excusable and welcome.

What is advertising? Advertising is the fine art of making yourself popular—that and nothing more. Selling goods at a profit and creating a demand for goods, old or new, implies salesmanship. And it follows that the popular man sells the goods.

The two go hand in hand, and other things being equal, the popular man is the successful man, and in a business sense this is nowhere more apparent and evident than in the retail drug business.

Therefore, the pharmacist is looking a long way ahead when he takes himself well in hand and begins to devise ways and means to make himself popular. He is then looking ahead to and preparing for that proverbial "rainy day" which comes to all of us.

You may not become the financial rival of a steel (or steal) millionaire or a Standard (above or below) Oil magnate, but as a popular and honorable pharmacist, you probably would not be willing to change places with either of these financial potentates.

The Value of "Good Will."

You have undoubtedly wondered at the price at which some business places, including drug stores, have been sold—sometimes for twice as much as the stock inventoried. The seller demanded and got the extra amount over inventory price because he was popular and on the bill of sale it appeared as "good will."

Such proprietors in their younger

days looked a long way ahead. They prepared for a rainy day by becoming popular—and it paid them handsomely, as the bill of sale shows.

You can do this also. Every pharmacist can do it, if a strong attempt is made. It is just as inexpensive to become popular as it is to become unpopular, or to simply stay in the average, indifferent class.

The efforts made in becoming popular are always happy ones. They provide that inmost optimistic feeling so important to success and which brings out the best there is in your customers, and they like you for it, sometimes in spite of themselves, but the result is "plain popularity."

Origin of Popularity.

You go to church and meet some of your customers, thus showing that you also take an interest in things that interest them, and they beget a different feeling for you, quite different from the one they formerly entertained. In fact, it is a fellow feeling that brings you closer to them than the four walls of your drug store would allow. This makes for popularity.

You attend public meetings, theaters, picnics and the like, where your customers also congregate, and you thus show them that you are one of them—have desires and feelings similar to their own, and this makes for popularity. It brings your personality into more direct contact with that of many of your customers, some of whom seldom see you but once or twice a year and then only when they come to trade with you.

But don't imagine that this "process of becoming popular" is an instantaneous one. It is not. People will not say, "Oh, I saw druggist Blank in church today and from now on I am going to trade there as much as I possibly can."

Becoming popular is as much an unconscious habit as it is anything else. You become popular really without knowing it, because you simply take a manly interest in the welfare of your community, and it grows on you.

Popular with the Profession.

You attend meetings of pharmacists and physicians, thereby keeping in close touch with the trend of matters pharmaceutical and therapeutical. And as you read one or more good drug journals, and possibly also a medical journal, you are able to talk intelligently and understandingly with your fellow pharmacists and physicians, and this creates friendship and popularity.

Such friendship is of considerable value to your business, as intercourse with such professional men is certainly a privilege and a pleasure, and while it may not be a direct business-getter, it is none the less effective and valuable.

It helps to expand your mental horizon, and the knowledge gained from such intercourse very often places you in a position to offer suggestions or information, especially to physicians, that become of considerable value to them at times. This also makes for popularity.

Here, as elsewhere, it is the little things that count, that count up to make the big ones. Once the physician knows that you are well-read and capable, it will be to his interest to assist in making you popular.

For in reality you are just as important to the physician as the physician is to the public. He wants to do the best he possibly can for his patients, and by having your assistance as a capable pharmacist he is able to make his work count.

Work Begets Popularity.

The greatest inducement towards becoming popular is **work**. Work such as every conscientious pharmacist has before him at the present time, if accomplished, will make the pharmacist the most popular man in American life.

Is he equal to it? Will he do it? Will he so shape public opinion through his efforts that laws will be placed on the statute books which will not only protect his interests in the highest degree, but that of the public as well?

Will the pharmacist realize that his duties to his fellow man and to himself consist of more than the mere furnishing of good medicines to his customers? If he does, the future of the art of pharmacy will indeed be most gratifying and ideal.

CHAPTER XXXVI.

Christmas time is coming to be looked upon generally as one of the most profitable seasons for the business man.

Many business men, including druggists, have average daily sales during

their entire Christmas stock is not sold out Christmas eve.

This will never do—people expect to be told what you have. They will often make up their minds what they will purchase when they read your advertisement. If they don't read your advertisement these people will not buy **your** goods, but will buy goods of the people who do advertise.

If you intend to stock and sell Christmas goods, you must advertise them or it will prove a losing proposition for you.

What to Advertise.

There are many articles in your regular departments that are suitable for

Christmas Presents

For Your Friends

**A Box of Fine Paper Always
Makes a Good Christmas
Present to your Friends**

Our assortment is very large and includes everything desirable.

We will be glad to help you choose.

The makers of this paper have never been able to put so much quality and quantity in every box as this year.

The prices run from 25c in neat Christmas packages to elaborate leather cases of the finest wedding stock with initials, costing \$4.00 per box.

Our 75c boxes are gems and perfect beauties

**Your Druggist
BLANK & CO.**

Christmas Smokes

Christmas Smokes in our store means boxes of cigars containing 12, 25, 50 and 100 cigars to each box.

It means the choicest brands, the finest aroma and the various sizes, shapes and shades. Prices run from 50c to \$15.00.

Your gentlemen friends who are fortunate in receiving one of our boxes of cigars as a Christmas Gift are thrice happy—first, because you made them a present; second, because Blank has such fine cigars, and, third, because he can smoke them.

**Your Druggist
BLANK & CO.**

the week before Christmas, that are four to eight times as great as at other times.

Why? Because they have Christmas goods to sell and they are not afraid to advertise them. Some have the goods, but depend solely upon the "Christmas fever" of the people to effect sales and are sadly disappointed if

Christmas presents, providing you have a good assortment and tasty Christmas packages.

In this class are box paper, cigars, candy and perfume. In addition to neat window displays of these articles, telling advertisements must be inserted in your newspaper or sent out as circulars or booklets.

Copy for such ads. is reproduced herewith that may serve as patterns for the individual druggist, and a little time and thought spent in working out these ads. to suit local conditions will show large in dollars and cents by December 25.

While some of your people may know what they are going to buy as Christmas presents, the great majority must be told, that is, your advertising will have to influence them and at times it may even change their original intentions.

When one considers the vast amount of money spent for box-paper and perfumes, not only during Christmas week, but during the entire year, it certainly seems that druggists who sell these articles have a grand opportunity to make their stores headquarters for the sale of these articles.

They certainly do have this opportunity, but the only question is, will they take advantage of it?

Candy for Christmas

BLANK'S CANDIES HAVE ALWAYS BEEN GOOD

Almost anyone can and does appreciate a fine box of candy as a Christmas present.

Our luscious, dainty candies, put up in the prettiest of Christmas boxes, will gladden the hearts of many of Santa Claus' friends this Christmas.

By placing your orders with us, your friends will not be neglected. We will see that Santa Claus delivers promptly.

The prices run from 25c per box to \$2.00, and every one is a most acceptable gift.

Your Druggist

BLANK & CO.

A Christmas Present

Any woman, be it wife, or sweet-heart, or sister, or aunt, or mother, can appreciate a Christmas present of a bottle of really nice and dainty perfume.

Our handsome and unique Holiday packages of all the latest and regular standard odors make our assortment all the more attractive.

For example, we have the prettiest package containing one ounce of White Rose at 50c—two ounces at 90c—four ounces at \$1.50, and eight ounce bottles at \$2.50.

Other odors in similar sized packages. We not only try to please you as a buyer, but we also aim to please the recipient of your present.

*A Merry Christmas from
your druggist.*

BLANK & COMPANY

CHAPTER XXXVII.

Advertising is a peculiar proposition. It is peculiar because of the many different ways it can be done successfully and because there are so many wrong ways.

The art of advertising should always be looked at in a large rather than a small way. You are in business to make a living and to lay by a competency for old age. Therefore business to you should be a serious proposition—serious because it is your sole means of support.

You know with what seriousness most fathers or mothers think about the future of their boy, how they endeavor to find out his capabilities, possibilities, or natural bent, and how his learning and training is fitted to meet his natural inclination.

Training for Business.

All parents of course do not do this, but in direct ratio as it is done, in

that same ratio will the boy be successful. This kind of a boy becomes the great man, the man that will do things, do them on a large scale and successfully.

The other kind of a boy has the same chances, the same opportunity for big deeds, for a big name, or for worth-while success, but this other boy tries to do the big thing with small tools, he tries to drive a ten-penny golden spike with a ten-cent tack hammer, and the result is failure.

And so it is in advertising. You are attempting to move a big stock of drugs, medicines and merchandise, \$2,000 worth and more, with a ten-cent lot of advertising. It can't be done. Almost every attempt is a failure.

Study this proposition in a large way. You have for example a \$2,000 stock and expect to sell \$6,000 worth of goods each year. Ordinarily your percentage of expense (25%), would be \$1,500, and the gross expense for goods about \$3,600, leaving a net profit of \$900 for the year.

This net profit is too small and ordinarily represents a business that is not advertised. It represents insufficient net profits to defray personal and household expenses and allows nothing for accidents, future contingencies, independence, nor for the proverbial "rainy day."

The Public's Purchasing Power.

Therefore we repeat, it should become your duty to look at your investment, your welfare and your future in a large way. While \$6,000 represents business voluntarily given by your patrons for actual wants and necessities, it by no means represents their purchasing power, as far as you are concerned.

The average patron's purchasing power is twice as great as what he would ordinarily spend for actual wants, and often it is three times as great.

Your proposition then resolves itself into a question of how to induce your patrons to part with more of their

money and at the same time give them something they require "for value received."

Here is your opportunity to do something big, to double your receipts, and to approximately double your profits also. Are you big enough to see the possibilities of this, and big enough to be a general and map out a plan of action to this end?

The people are there with money to spend; that is the first fact to keep in mind. Fact No. 2 is that in some way or another most of the public are spending this money. The people can be induced to buy goods in addition to actual necessities if the merits of these goods are properly presented to them. This is a fact that has been amply demonstrated.

Existing Conditions.

These are the conditions as they present themselves. Now what you are to do is to rise to the needs of the occasion and become big enough to discover a method whereby you can become the gainer in a financial way by such conditions.

There is naturally not the least doubt that you want this extra business, but it is only the big man who realizes the necessity of doing something to get it. Any one can sell goods that are called for and this is where your \$6,000 comes from.

As the parent trains the boy from day to day to become a great man, so you also must train yourself and your business to become great. The end justifies the means. Besides, if you once get started after this business in the right direction, you will feel yourself a much more important personage **than** you do at the present time without having made such an effort.

Future Conditions.

The very first thing to do in beginning this campaign, which means future prosperity and independence for you, is to be deserving of success. Like the great general in war times, you must prepare yourself, look after the small details first, fortify your position

and make it impregnable. The balance, the actual fighting, is then easy.

This means that you must put your place of business, both inside and outside, in presentable shape. Make it inviting and pleasant. You must place yourself, and your clerks also, in such a position as regards cleanliness and courtesy as to merit patronage on your store's personality. The class of goods you sell must be of such quality as to hold trade when once won.

Defense and Attack.

There is your map, your ground-work, your defense. If you have been a good general, your position should be impregnable. Now comes the attack, your attack upon the public with convincing advertising. As your position is impregnable, the enemy must fall and victory is yours.

How theoretical this sounds, yet how intensely practical it is, **if you can make yourself a "big" enough man to see and meet present conditions.**

The investment of a small percentage of your daily receipts, say 2% or 3%, in a steady fire of advertising, such as has been suggested in these chapters, will convert your \$6,000 sales to \$10,000 sales, possibly \$12,000 sales.

Be a big man and spend a little money for advertising.

CHAPTER XXXVIII.

Good advertising lessens competition. The more good advertising the pharmacist does, the less will his competition be, for the simple reason that good advertising removes trade from other points and brings it to the pharmacist.

Easy in theory, many will say. And it is just as easy in practice, because the recognized laws of trade all sustain the fact that when a studied attempt is made to create a demand for a worthy article, that attempt is always followed by sales.

It matters not whether the article already is in use or demand, the mere fact that the pharmacist sells it in response to his advertising is proof pos-

itive that competition upon it has been lessened to just such an extent.

A Plain Fact.

If a small amount of advertising produces certain results, a larger amount, intelligently placed, will produce greater results, up to a certain point. This is true whether selling hair brushes, domestic remedies, or creating a prescription demand for U. S. P. and N. F. preparations.

The fact remains that the pharmacist has too much competition and it should be lessened. If he will look at the advertising proposition in a big way, that is, if he will comprehend the nature and amount of the competition and then apply himself diligently to the task of removing it in a studied and systematic manner, he is bound to succeed. Others have done it, hence it can be done again.

Competition to Remove.

What is the nature of the pharmacist's competition? First, we have the competition of the dispensing doctor, who usurps the pharmacist's right by compounding medicine without being qualified, either legally or professionally; second, we have the competition of the medicine peddler, who usually misrepresents both pharmacist and physician, sells proprietary articles, many of a purely fraudulent character and generally without paying for the privilege of doing so; third, we have the grocer's competition in spices and flavoring extracts, which trade should be supplied by the pharmacist for plainly apparent reasons, to say nothing of such articles as bird seed, proprietaries, chemicals in common usage, soaps, etc.

Then there is the competition from department stores, mail order houses, magazine advertisements, stationery and cigar stores, etc.

Getting Started Right.

Now by digging down deep into your thinking apparatus, you will come to the conclusion that the public is the particular party you want to convince that it is to their particular benefit to trade with you; therefore, all your en-

ergies in removing competition should be made in the direction of the public.

Is it worth while? Is it not worth something to you to get a portion of the trade of the dispensing doctor, to take something from the medicine peddler, from the grocer, etc., if it can all be done by one process?

It surely is, and in direct proportion as you **expect** to gain thereby, in that same proportion should you expend money in a well-directed campaign to gain.

An Entering Wedge.

The plan or process to be pursued must be a systematic one and it must be pursued with vigor and with regularity. The circular, which appeared in a previous chapter, "The Evils of Self-Medication," is an efficient entering wedge in a campaign of this kind and its inexpensiveness should commend itself to all pharmacists who are eager to redeem some of the trade they have lost or to get that which they never had.

This circular, the first of the "educating the public" series, which will be issued at intervals of two months, should be supplemented by another circular of the pharmacist's own get-up, every two months, so that the public will receive a circular or booklet from the pharmacist each month.

The pharmacist's circular will bring to the public direct and specific information about his quality articles of merchandise, domestic remedies, etc., and furnishes the connecting link between the bi-monthly issues of the "educating the public" circulars, issued by the N. A. R. D.

Producing Results.

That is advertising of the "lessening competition" kind, which is worth while for the druggist. It will cost something to get this information to the public, to be sure, but the investment **must** be made **before** results can be accomplished or expected.

The pharmacist should procure a mailing list, or make one, and go into this work with the intention of making it succeed. There may be no money available for this work, but by cutting

down some unnecessary expense, it can doubtless be procured. Some effort or some personal sacrifice should be made to procure funds to carry on a campaign of this character.

The education of the public along right lines means much to the pharmacist in the way of financial independence and fully as much to the future of pharmacy. Come pharmacists, take hold and push.

CHAPTER XXXIX.

The final aim of all advertising that the retail druggist attempts is how to make his business pay better. This one object must be kept in view constantly, for without this one objective point, all attempts have a tendency to result in failure, as it is but natural they would.

The previous articles on advertising in this book have made it possible for the druggist to write up good advertisements and when these advertisements are not intended for the newspaper, a way must be found to get the druggist's circulars, booklets, folders, etc., to the public.

Advertising by Mail.

While at times it may be advisable to send these out by messenger from house to house, it is generally the most profitable to mail them and hence a good mailing list becomes a necessity.

Distributing circulars by hand has never proven an effective method. It is cheap to be sure, but so are the results obtained. When mailed under 1-cent postage they are much more effective, while under 2-cent postage, sealed, a maximum amount of good is accomplished. The results, by mailing under a 2-cent stamp, are great enough to warrant the extra expenditure, as has been proven in almost every instance where it was done.

The druggist who has never attempted to do business with a mailing list has missed one of the most productive means of increasing his sales and profits.

Making a Mailing List.

There are many ways of obtaining a good list and it is often advisable to have more than one list. If you sell school supplies, you should have at least two lists, one being for pupils in schools and colleges.

A good, live circular, containing a nice write-up for all your school supplies, mailed to pupils under a 1-cent stamp, will produce almost as many customers as you mailed circulars, and many of these customers you could not get in any other way. Such a list is readily procured from some of the teachers or pupils at these schools or colleges.

Another special mailing list of value is one containing the names of such families as have a telephone. A notice at the bottom of any advertising going to such a list might impress upon these people the convenience of ordering by 'phone, of making use of your prompt delivery system, etc. This list is readily procured from the telephone directory.

Other special lists include one for nurses, one for physicians, one for dentists, and so on, as may be desired.

A General List.

The general mailing list is of course the most important one, although the special list for physicians is almost fully as important. This general list is made up from memory, from lists of voters readily procurable from election judges, from school children, from rural route lists, or from any other means as may be convenient.

It is of course important that a mailing list be kept up to date and this is accomplished in various ways—the newspapers are looked over for new residents and deaths, the postmaster should be instructed to return all your mail that cannot be delivered (from this you cross these names off from your list), and your account book, poison register and similar store memoranda will give data for additions and changes.

A valuable item in this connection is that a sample of every piece of advertising which the druggist sends out

should be kept for reference, to assist in preparing new copy, to make changes, etc.

List Is Valuable Property.

Druggists are often asked to furnish their mailing lists to manufacturers, and while at times it is profitable to do so, it is too valuable a possession to give to all inquirers, without first assuring yourself that it will not be used for any purpose inimical to your own interests.

Always Reliable

Robinson, your druggist, has made a Cough Remedy for the past 18 years, called *Robinson's Tolu Compound*.

It is a good medicine that has given relief in almost every instance where it has been used in time.

It contains only pure and standard drugs and does not contain harmful ingredients of any kind.

A cough remedy to be effective should be taken as soon as the first symptoms appear, and

Robinson's Tolu Compound

is one of the best for the purpose.

It comes in liberal sized bottles at 50 cents each. Sample bottles, 25 cents.

Robinson, Your Druggist

Main Street

Near the bridge

Such a list is often abused in exhibiting preparations and articles of merchandise that the druggist does not even want to handle, and it is often copied and sold to other firms, mail-order firms especially, and it then becomes a weapon that is used against the druggist who furnished it in the first instance.

One of the most important features of advertising by mail is that any booklet, circular, sample or letter sent out should be a first-class piece of work. Not necessarily fancy or gaudy, but the workmanship and material

should be such as to at once impress the recipient.

The cost of advertising by mail is much greater than by other methods, on account of the postage, but it is also much more productive.

Expense vs. Profits.

Where \$1 is generally spent in other ways to cover a certain amount of territory, it will cost almost \$3 to cover the same territory by mail. However, in striking an average for a year, where the \$1 will produce direct results of \$3 in extra business, it has been proven conclusively that the \$3 spent in advertising by mail produces \$22 in extra business.

Mail advertising is a profitable business-getting undertaking and if a druggist will look at it in a "big" way, it is bound to be one of his greatest assets. So valuable is it that it should not be neglected by any means, even though only a small beginning is made with only 50 or 60 names.

CHAPTER XL.

One of the principal reasons why a druggist goes into business for himself is to make money. The only way for him to make this money is to sell goods. If he does not sell enough goods to pay expenses, he will have to quit business.

If such a druggist were to quit business and move away, what becomes of his trade? It goes elsewhere, naturally. Somebody else would get this trade, because people will not stop using drugs, medicines and drug sundries.

Business a Game of Chance.

A person in the drug business is, as a rule, staking his entire capital in a game of chance, and the trouble with many is, they are willing to allow "chance" to do everything. They will not guide this "chance," they will not give "chance" an occasional boost, but they are indolently satisfied to let "chance" take care of itself.

What the druggist should do is to compare his "chance" with the "chance" of others, for instance: When

a horse owner enters his horse for a race, he is playing a game of chance, but he works first, last and all the time, to remove as many of the elements of chance as possible.

He pays a veterinarian handsomely to keep his horse in perfect condition. He pays for the best of feed and has the best of stable accommodations. He pays the best jockey to ride his horse, and because of all this, because he has reduced the elements of chance to a minimum, his horse wins (if it wins).

In a like manner if you will analyze every successful man, be he artisan, mechanic or professional worker, you will find that he is successful because he will "take no chances" that he can avoid taking. And then many people call them lucky. There is really no such thing as luck, as the law of cause and effect is ever operative and what is termed luck is but the effect of a definite cause.

And this is what the druggist must do to win, to establish a permanent business. He must remove every element of chance that is handicapping him.

As we have before stated, there is much more drug business, that is, the general drug business, in this country, than could be handled by the 43,000 druggists and their help, if they got it all. And as they are not getting it all, there is a handicap somewhere, a chance, and this **must** be eliminated.

He must be willing to spend some money in eliminating these chances, the same as the horse owner does. Other people get rid of this "chance" by paying out money to educate themselves, others pay out money, lots of it, to buy tools, to remove the elements of "chance," and so on, way down the list.

Give Your Goods a Chance.

It is not enough that you have invested \$3,000 in stock. Stock unless well displayed cannot sell itself. Somebody must talk for it in order to move it. There is a big chance that if you do not talk and talk everlastingly, that the stock will stay where you place it and it really becomes dead.

Advertise your stock. You bought it to sell and make money out of, and if it will not move of itself you must get behind it and push. Tell the people what you have. Make their mouths water. And when they come to buy, treat them so fairly and squarely and courteously that they will have to come again.

The Mail-Order House.

Tell them why they should trade with you, and if you do it right, they

a chance" in the direction of eliminating this "chance."

Recognize Your Position.

If you are deserving of the business in your locality, you will get it. As far as the mail-order house is concerned, everything is in your favor. You are right on the ground with the goods. As a rule, your goods are of better quality. And if the quality argument is worked correctly and persistently, it will win.

The sources of supply open to the mail-order and catalogue houses are limited. As a rule they cannot buy the higher class goods, as these are usually distributed through regular trade channels only.

Send your customers, as per your mailing list, some live, virile advertising, every week or two, and it will do more to take trade away from the mail-order houses than any other plan.

Co-operate.

It may be a good plan to get-together with five or six other merchants of your town and get out a joint folder or booklet, or pamphlet, thus saving considerable in both printing and postage. You are bound to win out if you make persistent efforts. This "get-together merchant" movement has been successful, eminently so, wherever it has been tried.

Supposing there are six, including yourself, in this scheme. You would issue a 32-page pamphlet and each one would have 5 pages of advertising in it, the first being a title page, the second a page of general information, as per sample illustration herewith, and on the back page, each could have a small ad. Talk it over with your brother merchants and get them interested.

Blankville, Iowa, Jan. 27, 1910.

To our Customers:—

A careful reading of the following pages will convince you that we are very anxious to have your trade. We sell goods of quality only and that is the only kind you want. A seventy-five cent article will, as a rule, give better satisfaction and last longer than two similar articles at 50c each.

We want to keep the money of this town at home, where it will do more good than if you send it to Chicago. For this reason we will sell the best goods that we can buy at very reasonable prices.

If everybody sent their money to Chicago for what they needed, all the stores would have to close up and then many people would have to move away and you and everybody else would suffer.

We want to prevent this by asking you to trade with us. We will give you 100 cents worth in value for every dollar you spend. We will gladly exchange goods. We will get anything for you that we do not have in stock.

Compare our goods and prices with others and you will trade with us.

Respectfully,

J. J. Jones, Dry Goods.
Smith & Co., Hardware.
Peter Blank, Druggist.
John Paul, Jeweler.
Johnson Music House.
Peter's Furniture Co.

will come. This talk about legislating the mail-order houses out of business is all moonshine. It can't be done. But you can take their business away from them, if you are willing to "take

Prescription Pricing and Compounding

CHAPTER I.

The importance of this subject and the intense interest manifested in it by pharmacists throughout the country, shows how thoroughly alive NOTES is to the interest of its readers and to the profession of pharmacy.

NOTES, the official Journal of the N. A. R. D., for several years has gathered information from hundreds of pharmacists in all parts of the United States, and the various discussions on matters pertaining to prescriptions has finally crystallized into a very complete and authoritative Prescription Pricing Schedule, which is printed on the next page (page 278).

Need for Discussion.

It requires skill of a high degree to put up prescriptions correctly, and an actual realization of the value of human life to shoulder the responsibility, and this is worth money and must be paid for.

As for compounding a prescription, it is hardly to be expected that one man knows it all and a time will come when a pharmacist is at a loss how to proceed, especially as regards incompatibility and behavior of the numerous synthetics in combination or in mixtures.

There is no place in which this discussion could have been more profitably carried on than in the pages of a drug journal like NOTES; much is learned in this respect in a college course, but the information from

NOTES is a valuable addition to college study and experience.

Much can also be gleaned from text books, but the actual prescriptions in NOTES added even to the text-book information and gave more details.

The prescription department of the drug store, the practical source of the greater part of this information, also brings, in a sense, only a limited amount of information, and here again the subject matter in NOTES was of the greatest value.

Hence we have the oft-repeated statement by so many prominent pharmacists that "NOTES is a post-graduate course in Pharmacy."

From Michigan.

E. J. Van Marter, Jackson, Mich., writes: "I have read the comments on this subject with a great deal of interest as well as profit to myself, and think NOTES a great educator that every druggist should read regularly.

"I have just had a little experience with a prescription, a copy from a Toledo (O.) druggist, as follows:

R Potass. Iodidi \mathfrak{z} ii
Hydrarg. chlor. corr.gr. ii
Infus. Gent. Co.
Aq. Menth. pip., aa. \mathfrak{z} iv

M. Sig.—A teaspoonful three times a day after meals.

"I filled this for \$1.00, which I thought was very reasonable, but the proverbial "kick" was there, the customer claiming he had never paid over 75c for it, and as there was no price mark on it, I could not dispute his word."

The N. A. R. D. Prescription Pricing Schedule

THE FIGURES ARE COMPOUNDING FEES ONLY.

LIQUID PRESCRIPTIONS: Minimum charge, 25c. All simple or compound mixtures, internal or external, dry or liquid, eye or private disease remedies, and veterinary

Quantity.	Dose. 1-5 M.	Dose. 10-25 M.	Dose. 3ss-3i	Dose. 3ii-5i	Gargle and External only
½ oz. ....	.25	.20	.15	.10	.10
1 oz. ....	.35	.30	.20	.15	.10
2 oz. ....	.45	.35	.25	.20	.15
3 oz. ....		.40	.30	.25	.20
4 oz. ....			.35	.30	.25
6 oz. ....			.40	.35	.30
8 oz. ....			.45	.40	.35
12 oz. ....			.55	.45	.40
16 oz. ....			.60	.55	.50
32 oz. ....			.75	.70	.65

PROPRIETARIES: Original package, regular retail price. When costing over \$2, \$4 or \$8 per dozen, add 65 per cent to cost. When transferred to new container, add 15 per cent to regular retail price. When part of package is dispensed, double cost of amount used and add charge for container (see below).

DRY AND FATTY PRESCRIPTIONS: Minimum charge, 15c. These figures are compounding fees only.

Pills, Powders, Capsules, Wafers, Etc.

4.....	.10	10.....	.25	20.....	.40	40.....	.60
6.....	.15	12.....	.30	24.....	.45	50.....	.70
8.....	.20	15.....	.35	30.....	.50	60.....	.80

Then every additional ten up to one hundred, 5c. After that 10c for every additional 25.

Proprietaries costing 20c per hundred or less, 10c per dozen and 10c for labeling and package. Costing over 20c per hundred, 15c per dozen and 10c for labeling and package, with those exceptions as noted in the N. A. R. D. Price List. (A copy of which will be mailed to members for 25c. The price to non-members is 50c.)

OINTMENTS AND CERATES.

½ oz....	.20	2 oz....	.35	4 oz....	.55	8 oz....	.75
1 oz....	.25	3 oz....	.45	6 oz....	.65	16 oz....	1.00

SUPPOSITORIES, BOUGIES, ETC.

1.....	.10	5.....	.45	12.....	.75	24.....	1.35
2.....	.20	6.....	.50	15.....	.90	30.....	1.60
3.....	.30	8.....	.60	18.....	1.05	36.....	1.80
4.....	.40	10.....	.65	20.....	1.20		

CONTAINERS: Pill and Powder Boxes, 5c. Ointment Boxes, 5c. Ointment Jars, 1 oz., 5c; 2-4 oz., 10c; 8 oz., 15c. Bottles, 8 oz. or less, 5c; 10-16 oz., 10c; 32 oz., 15c; ½ gal., 20c; 1 gal., 25c. Glass Stoppered Bottles, three times the price of plain bottles.

VETERINARY: Charge same as for other prescriptions.

HOUSEHOLD REMEDIES, MIXTURES, ETC.: Add regular retail price of ingredients (none less than 5c) and charge for container. If any compounding is necessary, charge at rate of \$1.50 per hour.

MARKING PRICE ON PRESCRIPTIONS.

If a prescription or copy leave your store, mark it with N. A. R. D. price, as follows:

P H A R M O C I S T
1 2 3 4 5 6 7 8 9 0

ADMISSIBLE CHANGES: If customer is poor, add a star (*) to price mark, showing you have gone below Schedule Price. If your present prices are lower than above, raise them gradually to Schedule Prices.

IMPORTANT HOW TO FIX PRICE.

The Price of the Prescription is the Compounding Fee, + the cost of the container, + twice the cost of the material. (Exception: When the cost of material is over \$1.00, multiply cost by 1½ instead of 2.) These prices are based on an approximate \$1.50 per hour scale.

The price to charge for this prescription is \$1.10, as follows:

Compounding fee, 8 oz.....	\$.45
Container .....	.05
Material (cost .30) \times 2.....	.60

Total	\$1.10
-------------	--------

N. F. Faulty.

The Compound Infusion of Gentian is prepared according to the National Formulary; this, however, is a travesty upon good pharmacy, as an infusion should not be made by diluting with water, a tincture, made with diluted alcohol.

The infusion should be made by pouring boiling water upon the ingredients and being allowed to macerate for $\frac{1}{2}$ hour; after straining a small per cent of alcohol may be added as a preservative.

The N. F. preparation is no more an infusion than is the Pharmacopoeial preparation, Tr. Gentianae Compositum.

In case of poisoning by a mercurial salt, for instance when an overdose of medicine containing it is taken, as in the above prescription—the prompt administration of the white of eggs acts as an efficient antidote; the antidote, however, must be given promptly, as mercuric poisons act very rapidly.

Fate of the Cutter.

Occasion for complaint as in the above case always has existed, but is gradually disappearing, for this "cut-rate" habit, when it has once fastened upon a person, is difficult to throw off.

Public sentiment in this respect is doing much to remedy the evil, for a "cut-rater" as a rule is a very short-sighted person, little dreaming that his operations are bound to act as boomerangs.

The public has learned its lesson from the cutter to its own loss and sorrow, and now knows that something can not be had for nothing.

The road of the cutter is the same as that of any person who "goes to the bad;" one false step leads to another until the end. First, the price is cut on a good article and if the cut

price is established and the profits are gone, self-preservation calls for a cut in quality, and then the down-hill journey is under full head.

The only course to pursue for a pharmacist in an instance like the above is to state that for the time required and grade of materials he puts into the prescription, the price is as low as it can be made, and if others feel that their time is worth but little and are not particular about the quality of their medicines, the chances are that their prescriptions are not worth even the low price asked for them.

Tell your customers that you consider yourself above these sneaky, dishonest ways of gaining patronage, and that you will only furnish the very best in medicine for the sick.

By working along these lines you will in time get the bulk of the prescription business, and you will also get "the Schedule" prices, for people will go to a **pharmacist whom they can trust**, regardless of what your private opinion may be.

It will be the matter of but a few years' time when a "Cut Rate Drug Store" sign will operate as a scarlet fever sign now does on a residence door.

Chemical Incompatibility.

B. Ammonii carbonatis	3i
Ammonii chloridi	3i
Syrupus Scillae	3ii
Syr. Glycyrrhizae, ad.....	3iv
M. ft. sol.	

D. Sig. A teaspoonful every 2 hours.

The price to charge for this prescription is 50c, as follows:

Compounding fee 35c, + container 5c, + material (cost 5c \times 2.)

A prescription similar to the above is very frequently prescribed in croupy affections, and as the action of the Carbonate of Ammonium is desired, the medicine will be of but little value, as almost one half of the Carbonate is changed to Acetate by the action of the Acetic Acid in the Vinegar of Squills from which the Syrup is made.

You should communicate with the physician and apprise him of this fact, as he may not know of the acid nature of the Syrup. Upon being asked for suggestions, you can state that Syrup of Acacia would be the proper substitute to use.

CHAPTER II.

There are four things very desirable in the compounding of prescriptions, and for that matter, also, in the making of the official preparations.

These four are: First, be accurate; second, be neat; third, work as fast as possible; fourth, charge the correct price.

Overshadowing all these is the most important one of all and which is presupposed to exist before any of the other desiderata are considered at all—and that is KNOWLEDGE.

Knowledge is the knowing how and the reason therefor, and that is what these articles are intended to supply.

From Buffalo.

The following prescription has been sent in by a Buffalo druggist, asking how a smooth, uniform mixture can be made and whether his price of 75c was correct.

R
 Ac. Hydrochlor, dil. 3iiss
 Taka-Diastase 3i
 Papain, B. & S. 3i
 Pepsin 3i
 Liq. Peptoni, L. and Co.,—ad. 3iv

M. Sig.—A teaspoonful after meals.
 As the ingredients of this prescription cost 55c, the price to charge should be as follows—compounding fee 35c, + container 5c, + material (cost 55×2) \$1.10, = \$1.50.

The above charge of 75c for this costly mixture is manifestly poor judgment and poor business.

If a pharmacist were in business for his health and tries to break even, he would charge just 75c for it, for the expense of doing business (25 per cent of the gross sales) added to the 55c cost of material, would exactly produce the 75c.

Business Sense and Professional Knowledge.

Common sense is a very valuable asset and its use should be cultivated. If a pharmacist must make his livelihood from the preparation of medicines, it is not enough that he be shown how to make them, but also how to charge for them. The two go hand in hand and are inseparably linked, unless every prescription clerk has a business manager near by to price the prescription.

We are very glad that this prescription was put up for 75c and doubly glad that we found it out, and we trust it will cause some pharmacists to realize the fact that it pays to watch prices.

Undoubtedly many of the common arguments that pharmacists have of "hard times," "drug business don't pay," "working day and night and living from hand to mouth," etc., are due to just such poor business principles as are here pointed out.

To make a smooth mixture of the above, reduce the pepsin to powder in a mortar, add the Papain and Taka-Diastase, and gradually add some of the Liquid Peptonoids, stirring constantly until free from any lumpiness which may occur. Then add the Acid and lastly enough Liquid Peptonoids to make 4 oz. Attach shake label to the bottle.

The customer, of course, realizes that he is paying a high price for 32 doses of medicine, but when these secret proprietaries are prescribed some one has to pay for them; they are costly in inverse ratio to their value.

Intelligent propaganda work is the only way open for a change, and if you will bring to the attention of your physicians the fact that pharmacopoeial preparations are more valuable and cheaper than the proprietaries, you will receive no more such prescriptions.

A Chicago Prescription.

The following prescription was filled by one of our best pharmaceutical experts and a former board examiner, Wm. Bodemann, Chicago, and because

75c was charged, the proverbial "kick," and a very forceful one, was registered.

R Potass. Iodidi, Sat. Sol. 3ii

Sig:—Five drops, four times per day.

The charge for this should be, compounding fee 35c, + container 5c, + material (cost 25×2) 50c = 90c.

Mr. Bodemann's customer produced proof that he had paid 35c for it in Salt Lake City and 25c in a city in Florida, which would show that these druggists actually lost money IF they put it up right. There's the rub, did they put it up right?

Mr. Bodemann continues, "Against stupidity the gods battle in vain; among our oral questions in examination was one on saturated solutions and I very often got the answer—'two drams for two ounces saturated solution of Iodide Potassium.' For this 35c might do, but it is far from a saturated solution."

Can Be Explained.

Cases like these can readily be explained to our customers without hard feeling or loss of custom by telling them what they are getting as compared with what they probably got.

When a physician prescribes Potass. Iodid, sat. sol., he expects 1 grain of the salt in every minim of the solution (approximately, 1 grain to the drop), and if it is made right, that's what the patient will get, and 2 ounces are worth 90c.

Iodide of Potassium is soluble in 0.7 parts of water, hence 100 grains of it completely dissolve in 70 minims of water, making 100 minims of solution.

This error, and a grievous one it is, may result from the fact that many pharmacies have a Solution, handy for quick dispensing, containing 3i Potass. Iodid. to the ounce.

A Costly Jersey Prescription.

The following prescription was put up some time ago by F. A. Bongartz, president of the Jersey City R. D. A., and for which \$3.00 was charged, this being the proper charge according to the schedule at that time (when the cost of material was multiplied by two, if the cost did not exceed \$2.00).

However, in the new schedule the charge for material, when cost is over \$1.00, is to be multiplied by $1\frac{1}{2}$.

R

Diuretin (Knoll) 5v
M. ft. capsul, No. 30.

Sig:—One three times a day.

Diuretin costs per avoirdupois ounce \$1.75, hence 5 troy drams would cost \$1.20. These expensive chemicals are bought by the avoirdupois ounce, and even then often short weight will creep in, but you sell them on prescriptions by the troy ounce or by metric weights, and allowance for this must be made or you will come out short.

This prescription should be charged for as follows: Compounding fee 50c, + container 5c, + material (cost $\$1.20 \times 1\frac{1}{2}$) $\$1.80 = \2.35 .

CHAPTER III.

In addition to the high grade prescription scale which should be found in every first class pharmacy, a so-called laboratory scale for your prescription counter or laboratory table is a great desideratum.

This scale costs about \$7.00, has pans six inches in diameter and a capacity of one pound.

It is of great value in relieving your sensitive scale of unnecessary strain, besides it does away with the practice of going to the scale counter whenever you have prescription calls for one or two ounces of any chemical or a like amount of some ointment.

Value of the Laboratory Scale.

The value of this becomes apparent in a prescription like the following, the ointments or ointment bases in most stores being generally far removed from the counter scale, and therefore much time would be consumed in weighing and going back and forth.

R Thymol Iodidi.
Naphthaleni, aa. 3ii
Axungia porci.
Adeps lanae.
Petrolati, aa. 3ii
M. ft. ung.

Sig: Anoint body thoroughly every evening.

A perfectly smooth ointment is made quickly of the above by rubbing the Thymol Iodide and Naphthaleni with a little Oil of Sweet Almonds or Castor Oil, and then adding the other ointment bases.

Enough oil only need be added to make a perfectly smooth cream. Axungia porci is a P. G. title for Lard, (Adeps.)

The price to charge for this prescription is \$1.15, as follows: Compounding fee 65c, + container 10c, + material (cost 19c \times 2) 40c.

It should be your ambition when sending out ointments to have them pharmaceutically perfect, for this is one of the best assets a prescription business can have, and appreciated alike by both patient and physician.

Palatable Prescriptions.

How many pharmacists have received a prescription similar to the following? Some physicians (may their number increase) habitually prescribe in this manner wherever possible, knowing that the pharmacist will do his best to produce a palatable mixture.

\mathcal{R} Sodii Bromidi,
Potass. citratis, aa..... \mathfrak{z} iv
ft. mistura, ad..... \mathfrak{z} iv

Sig: One teaspoonful four times per day.

A very palatable mixture is here made by dissolving the salts separately, each in one ounce of Peppermint Water, mixing and then adding enough Syrup of Raspberry to make four fluid ounces.

These additions must be faithfully noted on the prescription in order that a refill may be made exactly like the original. This manner of filling a prescription, which only concerns the palatability of the medicine, is worthy of careful study.

The finished product should, whenever possible, be clear and transparent and especial care must be taken not to overdo the sweetening.

A little experimenting with the following will soon make you an expert in this desirable art: The Aromatic

Waters, Glycerin, Syrup, Syrup Tolu, Syrup Orange Peel, Syrup Raspberry, Aromatic Syrup of Yerba Santa, Compound Syrup of Canada Snake Root, the various Licorice Preparations and numerous others.

The price for the above prescription would be 60c, viz: 35c compounding fee, 5c for container and 20c (cost of material 9c \times 2.)

Making Castor Oil Emulsion.

The following prescription for an Emulsion of Castor Oil can be made palatable in two ways:

\mathcal{R} Emul. Ol. Ricini, (33%)... \mathfrak{z} vi

Sig: Take one tablespoonful night and morning.

A quick method of preparing this is by means of the yolk of two eggs. The yolk alone must be used, the white being carefully removed by pouring from half of the egg shell to the other half.

The yolk is first rubbed smooth in the mortar, and then 2 oz. of the oil are **gradually** added, stirring rapidly, but avoiding as much pressure as possible. When the mixture is thick and the peculiar "crackling" sound is heard the emulsion is completed.

Now add 1 oz. of Syrup Orange Peel or Syrup of Raspberry and then enough Water to make 6 oz., carefully noting any additions on the prescription.

The other method is by means of Powdered Acacia and is official in the National Formulary (which see).

Physicians Prescribe, Pharmacist Must Dispense.

Mr. K. C. Ayers of Harrisville, Ohio, brings out a new phase on the subject of pricing the official preparations to those physicians who buy their supplies from the pharmacist.

This is a subject for each individual druggist to decide for himself, but we will say that it is mighty poor policy for a pharmacist to sell at anything under a 100 per cent advance, those preparations which he himself makes.

While it may be better financially for a pharmacist to sell his product to the physician than to have the physician buy his goods from a wholesaler

or physicians' supply house, this is not the ethics of the case.

Why should not the physician prescribe these preparations and let the pharmacist do the dispensing as is the spirit of our medical and pharmacy laws? Why should the pharmacist allow the physician to compete with him, when said physician is not registered by the State Board of Pharmacy? Dispensing by physicians has absolutely no foundation of justice where there is a pharmacist to do it; a dispensing physician can be likened a good deal unto the proverbial "jack of all trades and master of none."

The custom has simply given the pharmaceutical supply houses and the "Chemical Companies" an opportunity to foist upon physicians their therapeutic education and supplies.

It is up to the intelligent pharmacist to make a prescriber of the dispenser.

CHAPTER IV.

An important requisite to intelligent compounding is a good, serviceable prescription blank, upon which is given the physician's name, address, telephone number and office hours; important because when anything occurs to call for further orders from the physician, he can be reached without needless waste of valuable time.

The ability and skill of a pharmacist in compounding a prescription correctly, and the ability to decipher a poorly written one and divining the intention of the physician, is one of his most important duties and upon which much of his reputation depends.

A South Carolina Prescription.

The following is a copy of a prescription filled by J. E. Arant, Ph. G., Manning, S. C.:

℞ Saloli 3ss
Bismuth Subnitrates 3ss
Essence Pepsin, ad..... f3iv
M. Sig.—One teaspoonful every four hours.

The price to charge for this is 35c for compounding fee, 5c for container, and 45c for material (cost 23c × 2), or 85c.

Upon being told that the price would be 50c, the customer stated that he had it filled at another store in town for 35c, and as Mr. Arant refused to fill it for less than his original price, he lost the prescription.

We consider Mr. Arant's course just, dignified and eminently proper, and a course that is bound to result in good to himself, sooner or later.

People are slow to realize the deception practiced upon them as regards cheap and incompetent service, adulterated and substituted drugs, loose business methods and its consequent evils, etc., but when the realization does take place, as it is bound to, sooner or later, it will come suddenly.

In proof of this, just notice how the public dropped, like a hot iron, those alcoholic compounds parading as patent medicines the moment the Federal Government stated in positive terms, what they were.

A Change Coming, Surely.

As we have so often before stated, pharmacy is an exact profession and the day is now not far distant when nothing but the very best intelligent service and the purest kinds of drugs will do for the people; it may come through legislation or it may come some other way, but it's coming, and those pharmacists who are ready for it and waiting for it, will be the ones who will profit by it.

The above prescription offers no difficulty in its compounding, but the Salol should be ground to a very fine powder before being mixed with the other ingredients.

As a proprietary Essence of Pepsin was used, the cost could have been reduced 15c by using the N. F. preparation; the charge would then have been 70c.

From Michigan.

The Marquette firm, The Stafford Drug Co., send in the following for pricing comment only; prices are all based on the Schedule.

℞ Elix. Terpin Hydrate and Codein, Wyeth f3iv
Teaspoonful doses.

The price to charge is 50c, as follows: 5c for container and 45c for material (cost $22c \times 2$).

℞ Elix. Pepsin and Thymol Comp.,
Wyethf3ii
Elix. Lactopeptine, q. s. ad.....f3iv
M. Teaspoonful doses.

Charge as follows: container 5c, + material 50c (cost 23×2) = 55c.

℞ Quininae Salicylatisgr. x
Salolgr. xl
Acetphenetidinumgr. xxx
M. ft. capsul. No. xv.

Compounding fee 35c, + container 5c, + material 10c ($4c \times 2 = 8$), total to charge 50c.

℞ Tr. Saponis Camph.....f3iv
Apply as directed.

Compounding fee 25c, + container 5c, + material 20c ($10c \times 2 = 20$) a total of 50c, the price to charge.

These four examples afford a beautiful illustration of the benefits of propaganda work or the ill results of dispensing proprietaries. All four sell for practically 50c, but in the case of the first two, the proprietaries, you pay the manufacturer the real profits of the transaction, while in the latter case you keep all the profits for yourself as you ought to.

We trust these few illustrations will drive home to many inactive pharmacists the fact that it pays to make your own preparations and to tell your physicians about it.

Schedule Too High Here.

The Stafford Co. also take a well-grounded exception to the Schedule as regards pricing powders in Veterinary prescriptions, claiming that one fee only, the dividing fee, shall be charged, basing their claim on the fact that the final price will be too high and also that no double fee is charged in the case of powders for human consumption.

Previous Veterinary prescriptions sent in by pharmacists all seemed to indicate that the double charge should be made, for the reason that these powders as a rule are very bulky and require more labor and larger mortars for their preparation.

On the question of proprietary tablets this firm states that the charge could be increased very materially; the Schedule allows for exceptions in these preparations, as will be seen on page 26 (pills) and 34 (tablets) of the N. A. R. D. Price List. Considerable leeway is permissible in this class of preparations and many other exceptions will doubtless be added to the List when it is revised.

CHAPTER V.

The appearance of medicines as they reach the patient is of the greatest importance. A neat appearing package always produces a favorable impression both as regards the possible effect of the medicine itself and also as regards a continuance of favors which the patient's family may have to bestow.

A slovenly appearing package generally has the opposite effect, as it begets the impression that the medicine is not of much account, and such is generally also the case. Every finished prescription should be neatly wrapped in pure white paper (which is used for no other purpose), tied with light blue twine and sealed with red wax.

Some other distinctive color of paper may be used and in place of sealing with wax, a gummed address sticker may be used—but a separate and distinct style should be employed.

Terpin Hydrate Prescription.

The following prescription, from E. A. Klinger, Seattle, Wash., illustrates a pharmaceutical incompatibility:

℞ Codeinaegr. iv
Terpini Hydratis3ss
Potassii Iodidi.....3iv
Glycerinae3i
Elixir Aromatic, ad.....f3iv

M. Sig. One teaspoonful four times daily for cough.

Only a small portion of the Terpin Hydrate enters into solution, the greater part floating on top. While a shake label is necessary, this alone does not correct the fault. Even when the Terpin Hydrate is added as a very fine powder, it soon forms into small and large crystals, and very objectionable from every point of view. It

would be policy to advise the physician of the facts, and suggest prescribing, as a separate potion, the Elixir Terpin Hydrate with Codein, N. F., or to prescribe the Terpin Hydrate in capsule form.

The price to charge for the prescription is 80c, as follows: Compounding fee 35c, container 5c, material 40c (cost $19c \times 2$). Mr. Klinger has heretofore received 65c for this mixture, but this price should be gradually raised.

Proprietary Prescriptions.

Jos. L. Bidlack, of Lanark, Ill., sends in the following prescription, which he filled for \$1.25. He states that it was put up by an Iowa firm of druggists for 65c.:

R Liquor Ferri Albuminati,
(Dree's)240.00

Sig. Two teaspoonfuls after each meal.

As this preparation costs \$1.00 wholesale for a thirteen ounce bottle, or 62c for the amount stated in the prescription, it does seem ridiculous to put it up for 65c.

It shows either that the Iowa firm is substituting, or they don't know what the article is worth, or they are in business for their health, in either case such a firm is dangerous competition.

An honest statement to the effect that the grade or genuineness of medicines you are using is a factor in your pricing and a refusal to fill the prescription for less than your stated price, will generally prove sufficient evidence that you can be trusted.

Your strong talking point must be quality, and if quality really is there, you will have little to fear from substitutes, etc.

The price to charge for the above prescription is \$1.30; viz., 5c for container and \$1.25 for material ($62c \times 2$).

A Minnesota Query.

I. Kingman, East Grand Forks, Minn., sends in the following for pricing:

R Adrenalin Chloride.....25 gm
Spir. Vini rect.....30 gm
Glycerinae, ad.....60 gm

M. Sig. Use as directed every 4-5 hours.

The Adrenalin Chloride Solution, 1 in 1,000, is meant in the above, costing \$1.00 per ounce. The price to charge is \$1.85, as follows: Compounding fee (external), 15c, container 5c and material \$1.65 (cost $83c \times 2$).

This mixture should be dispensed in a colored bottle, as the action of light may decompose the Adrenalin.

A Troublesome Mixture.

The following prescription from Weingartner & Co., Palo Alto, Cal., if filled as written, is very liable to make trouble for all parties concerned.

R Aristolgr. xx
Flect. Hydrastisf3ii
Pinus Canadensis, alba....f3ii
Morphin. sulf.gr ii
Listerinef3ii

M. Sig. Inject 3 to 5 times per day.

This is a very irritating injection, containing approximately 25 per cent alcohol, and evidently one of the numerous so-called aqueous fluidextracts of Hydrastis is intended, or possibly two drams of the U. S. P. fluidextract.

A fair price to charge for this unpharmaceutical muddy looking mixture would be \$2.15, according to the following: Compounding fee 30c, container 5c and material \$1.80 (cost $90c \times 2$).

An Effervescent Prescription.

J. F. Rowcliffe, of Peoria, Ill., sends the following for comment, claiming that it effervesces after standing awhile, but the doctor claims he never had any trouble with it:

R Sodii nitritis.....3i
Ess. Pepsin (Fairchild)...f3iv

M. Sig. One teaspoonful four times per day.

The effervescence is caused by the formation of gases, through the action of the acids in the essence on the nitrite, which is alkaline, but whether this would change the therapeutic action is problematical.

When any effervescence is noted in the compounding of a prescription this must always cease before the bottle is finally corked and delivered.

Otherwise the cork may pop out or the bottle may even burst, and it also

is best to caution the customer that the mixture may "pop" when the cork is removed, that any possible fear on the part of the customer may be allayed. The proper price to charge for the above is \$1.10; viz., 35c for compounding, 5c for container and 70c for material (cost 35c \times 2).

CHAPTER VI.

The receiving of a prescription is a more important matter than it is generally credited with being.

A little dignity is always becoming and questions should be answered cheerfully, but nothing must be said or done to impair confidence on the part of the physician.

Your customer may have just come from a sick room where a member of the family is very sick and at such times a customer is under a peculiar nervous strain that must be reckoned with.

Be Careful.

A shrug of the shoulder or the elevation of an eyebrow, while reading a prescription in view of the customer speaks volumes to him and creates a suspicion in his mind that something is wrong, and this must be guarded against.

If questions are asked or opinions desired, do not say "yes, it is good for that", or "yes, it is a heart stimulant," etc. The medicine may be for something entirely different from what you imagine and the customer will naturally jump to the conclusion that the physician doesn't know what he is about.

The facts of the case, however, are that the physician does know what he is doing and knows the secondary or remote action of some of the ingredients of his prescription, and your answers or guesses may be far from the truth.

Again, you have no right to reveal to the customer either the character or the names of the ingredients of a prescription.

You must be very diplomatic in parrying inquiries like these, for they are not asked because the physician is distrust-

ed, but to confirm, in a measure, his actions, and in many cases to also confirm the customer's conclusions.

Do Not Give Information You Do Not Possess.

A most satisfactory way out of such difficulties is to say that "the action of this medicine may be one of many, all depending upon the pathological conditions present, and that it is manifestly impossible to know these conditions without being a physician."

Aside from this you have no right, either legal or moral, to reveal the information, even if you could give it; for a physician, being human like yourself and other people, considers "self-preservation" the first law of nature.

You must co-operate with and sustain the physician in these cases of apparent unjust blame and censure, and if it were done more generally, it would materially cut down the dispensing done by some physicians; it is a case of "you help me and I'll help you."

From California.

A subscriber from California sends in the following for pricing and comment:

R

Lactopeptine3i
 Ingluvin3iiss
 Cinnamomi pulv.....gr. xv
 Magnesii oxidi.....3iiss
 M. ft. pulv. No. xii
 Sig. One three times daily.

The proper charge for this prescription is 90c, as follows:

Compounding fee 30c, container 5c, material 55c (cost 28x2). This seems like a very high price to charge for twelve powders, but when it is considered that the retailer as yet is paying tribute to hundreds of high-priced nostrums, the charge is not so high.

Two Oxides of Magnesium.

It is important to know that there is a light and a heavy oxide of Magnesium, commonly called Calcined Magnesia, both of which are official, and both should be on hand. The difference is only in the method of preparation, the substances being identical; however, their uses are decidedly different.

For the above prescription and in all powder mixtures the heavy oxide only should be used, on account of its compact nature and easy manipulation.

The light variety should be used only for liquid mixtures, especially in aqueous suspension, as it forms the gelatinous hydroxide very readily, as seen in the N. F. preparation, Milk of Magnesia.

A 75 Per cent Emulsion.

From Denver, Colo., comes one of the most difficult prescriptions which it has been our fortune to run across lately, difficult because it will prove so to many pharmacists, namely, making a 75 per cent emulsion:

R
Ol. Morrhuæ $\bar{3}$ iii
Acid. Hydrochlor. dil. $\bar{5}$ iss
Europhen $\bar{5}$ i
Elixir Aromatic, q. s. ad. ... $\bar{3}$ iv
M. ft. Emulsum.

Sig. Two teaspoonfuls after each meal, and at bed time.

The ordinary method of making the emulsion with Acacia is out of the question, as this would produce at most only a 60% emulsion. Some emulsifying agent must be used that does not exceed six drams in quantity and pancreatin would at once suggest itself, only this would be decomposed by the acid present.

Yolk of egg is the only practicable way out of the difficulty and as the medicine will only last four days, no fear of spoiling need be entertained.

It is to be noted, however, that the yolk of the egg must be carefully separated from the white, otherwise the finished product will be lumpy.

The yolk of one fresh egg is placed in the mortar and beaten lightly to a smooth mixture and then the Cod Liver Oil is **gradually** added. Now add the acid mixed with sufficient Aromatic Elixir to make four ounces, and then incorporate the Europhen.

Therapeutic Incompatibility.

It is rather problematical what will become of the Europhen in this mixture, as this substance in contact with water decomposes.

A very good emulsion can also be made by using in place of the yolk of eggs, a mixture of two drams condensed milk and two drams water, and proceeding as before.

As this emulsion generally is of such consistency that it cannot be poured into a bottle, it should be dispensed in a four ounce ointment pot.

The mixture at best does not contain enough Elixir to properly flavor it and a little Oil of Orange and Oil of Lemon could be well added to the Cod Liver Oil before emulsification.

The physician may have excellent reasons for writing such a prescription, but in the absence of any knowledge as to what the resulting compound may be, it would be desirable to advise him of the various difficulties mentioned.

CHAPTER VII.

The Prescription Pricing Schedule as it appears on page 278 states: The price of the prescription is the compounding fee + the cost of the container + twice the cost of the material. (Exception: When the cost of material is over \$1.00, multiply cost by $1\frac{1}{2}$ instead of 2.)

The following suggestions for a sliding scale are offered by S. A. Beranek, of Omaha, Neb.

When cost is 25c or under, double cost; when cost is 30c charge 55c for material; when 35c, charge 60c; when 40c, charge 65c; when 45c, charge 70c, and when cost is 50c or over, multiply cost by $1\frac{1}{2}$.

This is somewhat in line with what we have continually advocated, namely, to raise the prices gradually and not at one jump.

The Schedule is eminently fair and should be worked up to, as it is manifestly impossible for many pharmacists to raise their charges to Schedule prices at one bound. But one thing must be remembered, the Schedule prices are not too high for honest work in prescription compounding.

Volatile Oil Emulsions.

There are many methods employed in the preparation of an emulsion of a volatile oil and to bring about a more

uniform and satisfactory method, the following prescription will serve as an illustration:

R Terebeni,
 Ol. Eucalypti,
 Ol. Gaultheriaeaa ʒi
 Ft. Emulsio q. s. ad.....f ʒiv
 Sig. One teaspoonful every three hours.

The price to be charged for this is 60c, as follows: Compounding fee, 35c; container, 5c, and material, 20c (cost 10,×2).

Many physicians will specify a certain quantity of Acacia, Mucilage of Acacia, Sugar, Syrup, etc., but if the amount is not conducive to a good emulsion, why you simply will not have a "good emulsion."

The easiest and the most satisfactory way of making the above volatile oil emulsion is to place 90 grains of Powdered Acacia in a 4-oz. bottle and add the oils. Weighing and measuring must be exact to produce a correct emulsion, and the bottle must be perfectly dry. Shake well and when thoroughly mixed, add 135 minims of water and again shake vigorously; in a few moments a thick creamy emulsion is produced.

To this may now be added 1 oz. of water, well shaken, and enough Syrup of Tolu to make four ounces.

The rule is to employ one-half as much gum as of oil, weight for measure, and one and a half times as much water as gum.

This makes the proportion thus: gum 1, water 1½, volatile oil 2.

An emulsion of a volatile oil is naturally not as stable as one prepared with a fixed oil, but the above process, if care in operation and precision in weighing and measuring are taken, will produce a very presentable preparation.

If the consent of the physician can be gained, the addition of six drams of Oil of Sweet Almond would make a more stable preparation and then you would proceed as follows:

Take three drams powdered Acacia (90 grains for three drams of volatile oil and 90 grains for six drams of fixed

oil) and thoroughly incorporate with the mixed oils in a mortar.

Then add at once five and one-quarter drams of water and stir until emulsified.

Bottles containing emulsions should always be accompanied with a shake label.

High Priced Trade Marked Chemicals.

G. M. Smith, of Woodville, Miss., sends in the following prescription, stating that his price, \$1.25, was considered too high:

R Sulfonal,
 Trional, aaʒiss
 M. ft. chart. No. xii.

Sig. One at night for sleep; repeat in two hours if necessary.

The correct price to charge is \$1.55, as follows: 30c for compounding fee, 5c for container and \$1.20 for material (cost 59,×2).

Had the physician prescribed the official drugs, Sulphonmethanum and Sulphonethylmethanum respectively, the price to charge would be 75c.

From Mississippi.

The following three prescriptions were also written by a Mississippi physician and paid for by him for a "peculiar" case of scrotum trouble he was treating, but he wanted them for \$2.00, evidently thinking the druggist was not entitled to much of any profit for his services:

R Plumbi acetatis,
 Tr. Opii, aaʒii
 Aquæ, q. s. ad.....f ʒxxxii
 M. Sig. Apply on cloth to affected parts during the day.

Dispense with a shake label and charge \$1.15, as follows: 65c compounding fee, 15c container, 35c material (cost 17,×2).

R Codeinægr. x
 Tr. Hyoscyami,
 Sod. Salicylatis, aaʒiv
 Aquæ, q. s. ad.....f ʒiv
 M. Sig. A teaspoonful, in water, every 3 or 4 hours.

This should also be dispensed with a shake label and 75c is the price, namely: 35c compounding fee, 5c con-

tainer and 35c for material (cost 17, x2).

R Antiphlogistine.....1 small box
Sig. Spread on cloth and apply at night. Wash off in morning with warm water.

The price to be charged for this proprietary is 60c; being the regular retail price 50c, + charge for labeling, etc., 10c.

If the contents of the can are transferred to a new container, add 15% to regular retail price (in this case 10c), thus making the charge 70c.

This makes the charge for these three prescriptions \$2.50.

Poisoning Treatment.

The above lead and opium prescription has at times been taken internally by mistake and in such cases, if vomiting has not already occurred, the stomach should be emptied by means of a stomach pump.

A large amount of Epsom salt dissolved in water should then be given, to form the insoluble lead sulphate and also that a purgative effect may be produced.

This treatment to be given only in the absence of a physician, but succeeding treatment must be under the advice and care of a physician.

CHAPTER VIII.

At every favorable opportunity, inform the physicians with whom you come in daily contact, of the great amount of good to be accomplished when the physician remains in control of his prescriptions.

The words, "Not to be repeated," should be placed upon every prescription which in the physician's opinion might lead to the formation of a habit, or whenever he may suspect that the prescription could be used for "peddling" purposes.

Do Not Repeat.

But in this new state of affairs it is really not enough to place these words upon the prescription, as it throws the great bulk of whatever criticism there may be, upon the pharmacist, and unjustly so.

It is the duty of the physician, and it should be accepted as such with good grace, to inform his patient that for certain reasons (best explained by the physician himself) the prescription should not be refilled before he is consulted about the matter, as some change may be necessary.

Harmony and co-operation are essential between the two professions in the correction of this great evil of promiscuously refilling prescriptions.

The three following prescriptions are a little out of the ordinary and also require close attention to details to produce presentable mixtures.

Probably for this reason complaint as to the charge was made in each instance, the public at the present time being governed mostly by the size of the bottle when paying for prescriptions.

A Cod Liver Oil Preparation.

A Chicago pharmacist filled the following prescription for \$1.25, the customer stating that a downtown cut-rate store had filled it for \$1.00.

R Strychninae nitratisgr. i
Thyroid Gland3i
Ol. Morrhuae.

Maltine, aa.....f ʒviii

M. Sig. A tablespoonful, three times daily, as directed.

The price of this prescription should have been \$1.85, as follows: Compounding fee 55c, container 10c, material \$1.20. (Cost 60, \times 2).

When any druggist fills this prescription with its attending labor for the same profit which he makes on a dollar patent, it seems a very short sighted policy and in many instances it is done by cutters with inferior or substituted ingredients.

Whenever a question of price comes up, let your argument be quality, ability and the demand for just and fair compensation for services rendered in filling the prescription.

Maltine makes a fairly good emulsion with Cod Liver Oil, and the powdered Thyroid Gland should be incorporated with this. The Strychnine Nitrate should be dissolved in a small quantity of water in a test tube with the aid of heat and then very thor-

oughly incorporated with the emulsion.

It is very important that the solution of the Strychnine Salt be well mixed with the emulsion, that the mixture may be uniform, for each dose contains 1/32 gr. of this powerful alkaloid.

Toxicology of Strychnine.

Poisoning cases from Strychnine, in the absence of the physician, may be treated as follows: Keep the patient as quiet as possible; if convulsions have already begun, no attempt should be made to use a stomach pump, until the reflex excitability has been subdued by chloroform or amyl nitrite inhalations. A solution of Tannic Acid may be administered as a chemical antidote. The best physiologic antidotes are 60 to 120 grains Potassium Bromide and 20 grains of Chloral.

Before anything is attempted, however, a physician should be sent for, post haste.

From Michigan.

The following prescription was filled by one Michigan pharmacist for 75c and by another for 35c.

℞ Magnesii Sulphatis.
Magnesii Carbonatis, aa... 3vi
Sodii Bicarbonatis 3v
Glycothymoline f. 3i
Tinct. Zingiberis f. 3vi
Aquae Menthae pip., q. s.,
ad. f. 3viii
M. Sig. Take 2 teaspoonfuls as directed.

The price to charge for this prescription is 70c, namely 40c for compounding, 5c for container and 25c for material. (Cost $12c \times 2$).

To compound this prescription, mix the Magnesium Carbonate with the Tincture of Ginger and incorporate enough Peppermint Water to make a thin paste. Then add the other salts, the Glycothymoline and finally enough Peppermint Water to make 8 oz.

In this way a much more palatable and also a more presentable mixture will result than when the Tincture is added last.

There is really no excuse for such a great difference in the price of this

prescription as charged by the two pharmacists referred to, and the remarks made in the case of the before mentioned Cod Liver Oil prescription apply with equal force here. Cheap prescription prices invariably mean cheap, adulterated or substituted ingredients.

An Expensive Prescription.

℞ Salol 3i
Ol. Gaultheria.
Ol. Santali, aa..... f. 3ii
M. Sig. Use as directed.

This was filled by a Seaford, Del., pharmacist for \$2.25 and had been obtained by the customer at another store for 70c for half the amount, being at the rate of \$1.40 for the full amount.

The price should have been \$2.25 if pure and official drugs were used and the dose was less than a half teaspoonful, as follows: Compounding fee 45c + container 5c + material \$1.75. (Cost $\$1.15 \times 1\frac{1}{2}$).

If other than pure Oil of Wintergreen leaves is used and a grossly adulterated Oil of Santalwood, of which very much is on the market, the cost could be reduced as low as \$1.40.

In a case like this it is simply a matter of using standard or inferior drugs, and it would be good policy to satisfy your customer conclusively that he is really getting the very best at your price, for a difference of such proportions becomes a serious matter to you unless you give just cause for your charge.

CHAPTER IX.

We hope no pharmacist will oppose any legislation which includes the statement "and every pharmacy shall contain a copy of the latest edition of the United States Pharmacopoeia and of the National Formulary."

Then at least no pharmacist will have an excuse for saying that a U. S. P. or N. F. preparation, even when not accompanied by the letters "U. S. P. or N. F.," might be a "new nostrum."

Some pharmacists need education much more than physicians as the fol-

lowing shows: A physician in West Virginia wrote a prescription for Liquid Petrox with Iodine, 10%, and three pharmacists could not fill it, as they did not know their National Formulary well enough to know that Liquid Petrox is Petrolatum Saponatum Liquidum, N. F., an easily made preparation, which, however, must be made with Spirits of Ammonia and not with Aqua Ammonia.

In making this Liquid Petrox it is advisable to warm the mixture of the Liquid Petrolatum and Oleic Acid if they do not mix clear. When cold, enough Spirit of Ammonia is added (sometimes less than 25 parts by weight), that when a small quantity of the mixture is added to boiling hot water in a test tube, no free oil is observed.

In the above prescription, if two fluidounces were called for, you would dissolve 96 grains of Iodine in the Liquid Petrox, a clear solution being formed.

From North Carolina.

The following prescription was filled by Jefferson Reeves, of the Waynesville Pharmacy, Waynesville, N. C., for \$1.15. The same prescription was filled in Asheville for 75c.

℞ Papoid (Johnson) $\bar{3}$ i
 Phenyl Salicylatisgr.xl
 Carbo ligni pulv.gr.xl
 Capsici pulv.gr.xx
 Tabl. Strychninae, gr.1/30 No.xx

M. ft. caps. No. xx.

Sig: One capsule after meals.

The price of this, according to the N. A. R. D. schedule, is as follows: Compounding fee 40c, + container 5c, + material 70c (cost 35×2) or a total of \$1.15.

In compounding this prescription, frequent use of the spatula should be made to insure thorough incorporation, as the Salol is apt to stick to the sides of the mortar when being mixed with light substances.

In finding the price of 60 grains of Papoid at "\$2.00 per package" it must be remembered that an ounce is not

necessarily purchased for \$2.00, the price of 60 grains being about 30c.

A Good Pill Mass.

The following is a typical prescription of a good physician, who believes in getting his pills and capsules fresh and active.

It was sent in by The New Haven Drug Co., of New Haven, Ky., and was filled for \$1.25; a good, fair price.

℞ Quininae Sulphatis,
 Massa Ferri Carb., aa.....gr. xc
 Strychnin. Sulph.gr. iii
 Acidi Arseniosigr. ii
 Ext. Cascara Sagrada....gr. xxxv
 M. ft. massae, div. in caps. No. xc.
 Sig: One before meals.

The price to charge is \$1.30, as follows: Compounding fee 95c, + container 5c, + material 30c (cost 15×2).

The powders should first be thoroughly mixed, beginning with the smaller quantities and the Mass of Ferrous Carbonate is added last.

If necessary, a few drops of water may be added to make the mass perfect.

An Incompatible Prescription.

The following was sent in by J. M. Cory, of the Pioneer Drug Store, Kingman, Ind.:

℞ Tr. Ferri Chloridi,
 Tr. Nucis Vomicae, aa.....f. $\bar{3}$ i
 Acid. Phosphoric dil.f. $\bar{3}$ ss
 Glycerinaef. $\bar{3}$ i
 F. E. Cascara arom., q.s. ad. f. $\bar{3}$ vi

M. Sig: One teaspoonful after each meal, in a little water.

Tincture of Iron and Phosphoric Acid are incompatible; forming the insoluble ferric phosphate. The $2\frac{1}{2}$ fluidounces of Aromatic Cascara are mixed with the Glycerin, then the Tincture of Nux Vomica is added, followed by the Acid, and lastly the Tincture of Iron.

In this way a fairly presentable mixture is obtained, but a shake label should be attached to the bottle.

Instead of a little water, each dose should be taken in a considerable amount of water; this will prevent injury to the teeth, render it more palatable and in a measure will also make

it more active and not be so harsh upon the lining of the stomach.

A Sticker.

This prescription was sent in by S. D. Woolley, of Asbury Park, N. J., and is somewhat out of the ordinary:

R Olei Erigerontis $\bar{5}$ vi
Zinci Bromidi $\bar{5}$ iss

M. ft. capsul. No. xxx.

Sig: One capsule four times a day.

This presents an unusual difficulty on account of the large amount, 12 minims, of volatile oil in each capsule, and the ordinary means of massing with calcined magnesia and extract of licorice are found unavailable.

As anything to form a mass would make each capsule prohibitively large, we would advise the following procedure:

Make 30 capsules each containing 3 grains of Zinc Bromide. Then take a larger capsule, fill in with a dropper 12 minims of the oil, add the small capsule of the Zinc Bromide and seal.

If the size of the capsule is not important and a mass is desired, the only way to do is as follows:

Prepare a paste from 30 parts gelatin and 55 parts warm water, and after solution adding 15 parts of sugar.

For 6 drams of oil as in the above, take about 9 drams of this paste and then with the aid of sufficient powdered licorice root, a good mass can be quickly made.

This plan would be feasible if the physician's consent could be gained to prepare 60 or 90 capsules and the dose increased accordingly.

The prescription as written should bring 95c as follows: Compounding fee 50c, container 5c and material 40c (cost 20×2).

CHAPTER X.

As physicians are getting more into the habit of prescribing freshly-made pills and powders in capsules, another form of administering powders will undoubtedly come into vogue.

Reference is made to the cachet, or konseal, as it is more commonly called, and this form of administration is deserving of a more extended use.

It has many advantages, owing to the material from which it is made (flour), rendering the medicinal powder tasteless. It disintegrates quickly in the stomach, thus bringing the medicine in quick contact with the digestive fluids of the stomach.

For this same reason the gelatine capsule is exceedingly popular and becoming more so daily with physicians, but the capsule has its limitations: The trick or knack of swallowing a konseal is easily acquired, if patients are requested to place a small amount of water in the mouth, dipping the konseal in water and then swallowing the whole "like an oyster," or the wetted konseal can be placed in a tablespoonful of water and then swallowed from the spoon.

A Konseal Prescription.

F. A. Bongartz, of the Palisade Pharmacy, Jersey City, N. J., sends in the following prescription for konseals:

R Aspirin $\bar{5}$ vi
Caffeinae citratae $\bar{5}$ ss
Ext. Rhamni Pursh. Pulv., $\bar{3}$ i
M. ft. pulv. div. in Konseal. No. XXX.

Sig. One Konseal twice a day.

The price received for these was \$1.50, which is approximately correct. According to the N. A. R. D. schedule the price would be \$1.40, as follows:

Compounding fee 50c, + container 5c, + material 85c (cost 42×2).

In filling a konseal care must be exercised that none of the powder gets on the outside of it, the same as in capsules, otherwise the taste is noticeable and its purpose is defeated.

The top half of the konseal, similar to the lower half and which seals it, must be moistened just a little and the edges then firmly pressed together.

Moistening the edge of the konseal is accomplished in various ways, some using a camel's hair brush dipped in water and painting the edge with this.

As good a way as any is to moisten a piece of felt or heavy blotting paper with water and then to simply place the flat edge of the konseal on this moistened surface.

Just the least amount of moisture necessary to cause the two edges to adhere should be used, for if too moist, the edges will present a shrivelled and spoiled appearance.

An Expensive Ointment.

The following prescription was put up at the Leonard Prescription Pharmacy, Willimantic, Conn., for \$2.00, and a competitor put this ointment up for \$1.25:

R

Beta Naphthol3iv

Sulphur praec.3i

Bals. Peru.

Petrolatum, aa.3iv

M. ft. Ungt.

Sig. Apply locally at night.

According to the N. A. R. D. schedule, the charge for this should be: Compounding fee, 75c; container, 15c; and material, \$1.10; (cost 55c \times 2); or a total of \$2.00.

Some trouble may be experienced in compounding this ointment, owing to the difficulty of mixing the Balsam and the Petrolatum.

If $\frac{1}{2}$ oz. of the Petrolatum be replaced by $\frac{1}{2}$ oz. of Castor Oil or $\frac{1}{2}$ oz. of Solid Petrox (Petrolatum Saponatum Spissum, N. F.) this difficulty will be overcome. Lanoline is also a good combining agent for the troublesome Balsam of Peru.

The Beta Naphthol should first be rubbed to a powder, the Sulphur added and this followed by the Petrolatum.

The combining agent is then added, either Castor Oil, Solid Petrox or Lanoline, and lastly the Balsam. In this way a permanent and perfectly smooth ointment will be made, and it is well worth \$2.00.

CHAPTER XI.

Physicians often prescribe percentage solutions for certain reasons and these are often puzzlers to the pharmacist, especially when haste is necessary. For instance, you may receive a prescription at any time, as follows:

R Protargol3%

Aq. dist., adf. 3iv

M. Sig.: Use as directed.

Before proceeding with this, it must be remembered that we have three kinds of ounces—first, an avoirdupois ounce of water weighs 437 $\frac{1}{2}$ grains; second, a fluid ounce of water weighs 456 grains; third, a troy ounce of water weighs 480 grains.

Percentage solutions should always be made by weight, and as a fluid ounce of water weighs 456 grains, four fluid ounces weigh 1,824 grains.

In these weak solutions, the specific gravity can be disregarded; the physician wants 1,824 grains of the solution.

Three percent of this 1,824 grains should be Protargol, hence 55 grains of Protargol are required, and enough water should be added (1,769 grains) to make 4 fluid ounces.

In preparing this solution, about three fluid ounces of the water are placed in a graduate and the Protargol carefully deposited on the surface, carefully avoiding shaking or stirring.

The solution will be affected in about 15 minutes, whereas, if stirred, lumps would form, which would dissolve only with difficulty and necessitating a great amount of shaking.

The mortar method may also be used by placing a few drops of glycerin in the mortar, enough to make a paste with the Protargol, when the water can be gradually added, a smooth mixture resulting.

The price to charge for this prescription is 35c for the compounding fee, 5c for the container, and 30c for material (cost, 15c, \times 2), or a total of 70c.

Practical Worth.

Knowledge of percentage solutions can also be made of practical value in calculating the space which solids occupy, when in solution.

For instance, in the U. S. P. formula for Syrupus, 850 Gm. of Sugar are required to make 1000 cc. of Syrup.

Almost all soluble solids occupy a fluid space equal to about 65% of their weight, hence 850 Gm. of Sugar when dissolved occupy a space represented by, approximately 550 Cc.

Therefore if 450 Cc. of Water be added to the Sugar, the Syrup will measure 1000 Cc.

As an aid and a guide in percentage solutions, the following table may prove of value (quantities are approximate).

1 fl. oz. of a	1%	solution take	4½ grs.
1 " " "	2%	" " "	9 "
1 " " "	3%	" " "	14 "
1 " " "	4%	" " "	19 "
1 " " "	5%	" " "	24 "
1 " " "	10%	" " "	50 "
1 fl. oz. of a 1 in 1000 solution, takes			
½ gr.			

Incompatibility.

A Missouri pharmacist has sent in the following prescription, asking for a method of compounding, price, etc.

R Quinine sulphatis \mathfrak{z} i
 Potass. acetatis \mathfrak{z} i
 Syrupus Aurantii \mathfrak{z} ii
 Aqua Menthae pip., ad.... \mathfrak{z} iv
 Ac. Sulph. arom., q. s.
 M. ft. sol.

Signa=One teaspoonful in water every three hours.

There is no way in which this mixture can be prepared, unless it is put into an ointment pot and taken like ice cream.

Any way this mixture is attempted, the result will be a very bulky precipitate of Quinine Acetate, so bulky in fact that it can not be poured from the bottle.

You should communicate with your physician in a case similar to this, advising him of the fact that Quinine Sulphate and Potassium Acetate are incompatible and that the medicine if prepared cannot be poured from the bottle.

You might suggest that the Quinine be dispensed in two-grain capsules and the Aromatic Sulphuric Acid be left out altogether (providing its function was only as a solvent for the Quinine.)

This would make a very pleasant and palatable liquid mixture and if the Quinine capsules are thoroughly cleaned, would also make them tasteless. Quinine Sulphate is also incompatible with benzoates, salicylates and tartrates.

Many physicians overlook the fact that when they direct Quinine in solution (that is, adding an acid to affect its solution), they are administering it in its most bitter and disagreeable form.

Quinine in mixtures should only be suspended, not dissolved, then the bitter taste is not so objectionable. Such mixtures should be dispensed with a shake label.

CHAPTER XII.

One of the most important factors in prescription compounding is attention.

Checking and double checking systems are all well enough and satisfactory where two or more are employed in the store, poison closets are of assistance in preventing mistakes, and many novel plans are in use to guard against error.

But the only real safe method of preventing mistakes is the personal factor of attention, taking it of course for granted that you are primarily a capable pharmacist.

Pharmacists Alert.

To the credit of the great body of pharmacists be it said that mistakes are a rarity, for when we consider that over 100,000 pharmacists make daily calls on a stock of two or three thousand articles, the record is one to be proud of.

The great majority of drug stores are so situated that when a prescription comes in to be filled, only one pharmacist is responsible for its proper filling, because only one is on duty to fill it.

It becomes, therefore, a strictly personal affair to see that no mistakes are made, dependence upon one's self alone being the factor to prevent error.

In the first place, be sure you understand the prescription before you begin to fill it. It is far better to deliberate five minutes first than to work ten or fifteen minutes overtime correcting an error.

Remember that in a great measure

your skill is often instrumental in making an effective medicine.

Look at the label of each bottle closely when you take it from the shelf, look at it again just before weighing or measuring from it, and look at it carefully for a third time when you replace it upon the shelf.

A very good habit to get into, especially if you are interrupted much in filling prescriptions, is to leave all the containers on the prescription counter until the medicine is finished, and then replacing them one at a time and checking off on the prescription as they are put away.

An Iowa Prescription.

R

Hydrargyri Bichloridigr. i
Kalium Iodidi3x
Ess. Pepsin, Fairchild, ad. f. 3viii

Sig.—Two teaspoonfuls in a glass of water, after meals and at bed time.

The correct price to charge for this prescription is \$2.05 as follows: 40c for compounding, 5c for container and \$1.60 for material (cost 80c, \times 2).

This prescription was sent in by a Dubuque firm who filled it for \$1.85.

The lady who had it filled claimed that she had it put up in Chicago for \$1.00, but such an argument should easily be answered.

Anyone filling this for \$1.00 as written, either gets his ingredients for little or nothing, or else he has absolutely no knowledge of the cost of the drugs; in either case such a party is not a criterion to go by in pricing and can well be totally disregarded.

A Peculiar Prescription.

R

Lanoline3ss
Ol. Amygdalae dulc.....gtt. xx
Ol. Bergamottigtt. xv
Sol. Sod. Biboric, 5%.....f 3ss

M. ft. unguentum. Add the solution drop by drop, otherwise the preparation will be wrong. (Doctor's directions.)

Sig.—Shake. Apply salve to face at night.

This prescription was sent by an expert pharmacist from New Jersey, with the following comment:

"The author of this prescription is a New York specialist. After considerable labor and time spent in trying to compound it, I gave up in despair. I returned the prescription to the patient, requesting him to ask the doctor if he did not intend writing $\frac{1}{2}$ oz. Lanoline.

"I was a bit astonished to hear that it was not a mistake in the quantity, but that a salve could be made. The doctor also showed a package of ointment, claiming it was made according to the formula given.

Two Explanations.

"There are only two ways of explaining this: Either some one compounded it, using $\frac{1}{2}$ oz. of Lanoline, (and said nothing about it to the physician), or he is a better ointment maker than I am.

"I took the Anhydrous Wool Fat and worked the 'drop by drop' directions to a standstill, not even getting an 'Emulsion' or 'milk,' much less an Ointment."

We are thoroughly in accord with the New Jersey pharmacist's opinion. It can't be made into anything presentable.

Whoever did make it for the doctor, probably used $\frac{1}{2}$ oz. of Lanoline instead of $\frac{1}{2}$ dram, or $\frac{1}{2}$ oz. of Lanoline, 12 gr. of Borax and as much water as the Lanoline would take up.

If we received this prescription and were allowed considerable leeway (with the doctor's permission) we would proceed as follows:

We would rub together in a mortar Lanoline 3ss, at least 30 grains of Borax, and 10 grains of powdered Soap; then gradually add $\frac{1}{2}$ oz. of warm water, triturating thoroughly and constantly meanwhile and when the "milk" is formed, transfer to a bottle, add the two Oils and agitate thoroughly.

This will produce a very fair "milk" for a poor complexion, but an ointment, **never**.

CHAPTER XIII.

Every once in a while the pharmacist receives a prescription wherein the dose of one of the ingredients seems too large for safety.

The physician frequently has occasion to employ a drug in what would ordinarily appear to be a dangerous dose, as in certain abnormal conditions, great pain, etc., and such medicines are usually wanted quickly.

The pharmacist is put to some anxious moments in cases of this kind. Hesitation may cause serious injury or even loss of life, and if a mistake has been made in writing the prescription, the same results may follow if the medicine is prepared and sent out.

When confronted with such a condition, always choose the lesser of two evils, and communicate with the physician; or prepare the medicine and send it with a trusty messenger with instructions, meanwhile getting into communication with the physician.

Excessive Doses Should be Designated.

For this reason it would appear a matter of policy for a physician to designate a special or excessive dose by underscoring the quantity and also the remedy, thus indicating to the pharmacist that the dose has been purposely ordered, and then the physician is responsible; at least, jointly responsible with the pharmacist.

Many a life has been saved by the watchfulness of a pharmacist in such cases, and also a physician's reputation; hence a pharmacist should **never** take the responsibility alone when the dose is excessive and nothing to indicate that the physician wants the excessive dose.

A pharmacist is criminally liable with the physician, if he dispenses a prescription containing a fatal dose of drug, **unless he can produce proof that his action was warranted.**

It is well for pharmacists to always remember that they are responsible for every prescription they fill independently, regardless of the physician's responsibility. Don't ever fill a

prescription that is unpharmaceutical, no matter if a physician does order it.

Incompatible Proprietarys.

A. Bakst, of Providence, R. I., sends in the following two prescriptions for discussion and pricing:

Sod. Salicyl 3iiss
 Euquinine gr. xl
 Cascara Evacuant 3ii
 Elix. Glycerophos, Co. (Wyeth) 3x
 Ess. Pepsin (Fairchild)..... ad 3ii

M. Sig.—Shake. One teaspoonful every three hours.

This is an incompatible mixture, the Equinine being destroyed by the acidity of the mixture, but it can be dispensed. Doubtless other incompatibilities exist, as four of the five ingredients are secret mixtures the composition of which is unknown to the pharmacist, and what the resulting compound is, we cannot even guess.

The price to charge for this mixture is 90c, as follows: 25c for compounding fee, 5c for container and 60c for material (cost 30c, $\times 2$)—rather a high price for such a questionable mixture.

The other prescription, which was not dispensed for fear of a dangerous compound resulting, was as follows:

Liq. Potass. arsen. 3ii
 Syr. Ferri Iodidi..... 3ii
 Syr. Tolu 3iii

M. Sig.—A teaspoonful in water, four times a day.

There is nothing to be afraid of in filling this prescription as there is no incompatibility. The dose is not excessive, being 4 minims of Arsenic Solution; and even if an interchange took place and Arsenate of Iron was formed, the resulting dose would not be excessive.

CHAPTER XIV.

Many pharmacists are under the impression that everything connected with the compounding of a prescription should be done off-hand and quickly.

This is an utter impossibility, and it is owing to this one fact alone that we have so many poorly put-up prescriptions.

There are numerous instances occurring in the daily routine of prescription work which, if deliberated upon and studied more thoroughly, will always result to the pharmacist's credit.

Getting Information When Stuck.

The educated pharmacist does not know everything, but when he encounters something in his work that is unfamiliar to him, he knows where and how to find the information which will help him out of his difficulty.

Therefore, consult reference books freely when at all in doubt, remembering that education does not consist in the cramming into your head of isolated facts, but in the power to correctly apply the well-known principles of the art of pharmacy.

Never be in a hurry or appear in a hurry in the presence of customers unless absolutely necessary, and study the prescription when out of the customer's sight.

It is well to remember each time when receiving a prescription that your customer **always** thinks that his prescription is faultless and that the prescription is a **very important matter to him**.

Therefore, do not allow him to see that you do not understand it immediately; otherwise he may suspect you of ignorance, or as being incapable of filling it.

If any part of a prescription is not clear, study it carefully. Are any words possibly misspelled? Compare what is not clear with the balance of the ingredients. Do the directions furnish any clue?

If no way can be found out of any difficulty the prescription may present, inform your customer that some time will be necessary for compounding, and then get the needed information from the physician.

Tell him that part of the prescription has become illegible or make some other good excuse, but make yourself secure. The simplest little thing, as you well know, may make a great difference.

Be sure you are right, then go ahead.

Coated Ichthyol Pills.

The following prescription from a Savannah, Ga., pharmacist, presents a novel situation, namely, preparing Salol-coated Ichthyol pills.

R.—Pancreatingr. xL
Colalingr. iv
Ichthyol3i
M.ft. pil. No. xx, Salol coated.

The mass is readily prepared by mixing the ingredients, adding 15 grains of finely scraped yellow wax, 10 grains of starch (or powdered extract of licorice) and then enough powdered licorice root to make a very firm mass.

The coating process is very simple, but the details must be nicely and carefully attended to.

The Salol-Coating Process.

Use about 15 grains of salol and 2 grains of Tolu Balsam, the latter being used to prevent the coating from cracking. Melt the Salol and the Tolu in a small capsule or evaporating dish, using only just enough heat to melt them, and as they melt at about 110° F. (47° C.) very little warming is necessary.

Now place the twenty pills in this capsule and rotate them in the fluid until all the Salol is taken up and the capsule is cold.

This will occupy but little time, makes a nice coating, and the pills are preferably dispensed in a box with a little cotton.

The Ichthyol is best weighed off on a piece of paper which has been formed into a cup-shaped receptacle and from which it is readily removed with a spatula.

The price to charge for these pills is 90c, computed as follows: 40c for compounding, 5c for container, 30c for material (cost 16, x 2) and 15c for coating.

The object of the Salol-coating is to prevent the pills from dissolving in the stomach, as their action therapeutically is in the intestines.

A Dentist's Prescription.

The following prescription was written by a prominent dentist of the Lone Star state and was sent in by W. E. Cline, of Belton, Tex.:

R.—Sodii Chloridigr. viii
 Beta Eucaïngr. v
 Camphorgr. iss
 Chloral Hydratisgr. iss
 Phenolgr. ii
 Aqua distillatae℥ii
 M. S. A.

Mr. Cline states that the mixture forms an insoluble paste in the bottom of the mortar and no amount of trituration has any telling effect towards dissolving it.

Proceed as follows: Dissolve all the ingredients, except the Camphor, in the water in the two-ounce bottle; place the Camphor in a small mortar, add two or three drops of alcohol, triturate until the Camphor is dissolved, and then gradually add the aqueous solution, stirring constantly. The Camphor will dissolve completely.

Then filter the entire solution back into the two-ounce bottle, through cotton, which has first been moistened with Distilled Water, and the result will be a clear, colorless and perfect solution.

Camphor Water may be substituted in the above for all of the Camphor and part of the Water. The official Camphor Water contains approximately 2 grains of Camphor in each fluid ounce.

Chloral and Camphor should never be mixed when they are to appear in a solution, because water will not then dissolve them.

The price to charge for this mixture is 60c, as follows: 45c for the compounding fee, 5c for container and 10c for material (cost 5, x 2).

CHAPTER XV.

A most interesting story is brought to light in the following paragraphs, illustrating, in a way, a new N. A. R. D. activity.

It makes the writer's heart warm up and to look still more favorably on the optimistic side of what the future has in store for loyal N. A. R. D. members.

The correspondence came about in the following manner:

A prescription that had been filled by a Texas pharmacist was presented

for refilling in a Jersey City pharmacy.

Four Letters, and What Came of Them.

Jersey City, N. J., June 9, 1909.

Mr. H. L. W.—A copy of your prescription, No. 313520, came into my store recently, marked "i m, N. A. R. D." Being a frequent contributor to NOTES prescription pricing columns, I take exception to criticize your price.

R

Bismuthi Subnitratis℥iii
 Bismuthi Subgallatis℥ss
 Magnesii ustum℥ss

I figure thus: Bismuth Subnitrate, \$1.80 per lb., 36c; Bismuth Subgallate at 20c per oz., 10c; Calcined Magnesia, 5c; mixing and container, 25c; cost of drugs $\times 2 = 1.00$; total \$1.25. I do not think you can purchase any cheaper in Texas.

Please let me know whether one of your clerks made a mistake in charging 85c or whether it was marked wrong.

Hoping to meet you at the Louisville convention, I remain, fraternally yours, F. A. B.

The Answer from Texas.

San Antonio, Texas, June 12, 1909.

Mr. F. A. B.—Yours of June 9th, criticizing our price on prescription, at hand. We dispensed in wide-mouthed bottle and priced at 85c. We usually get \$1.00 for this mixture, but made this party a special price. We buy Bismuth Subnitrate in New York at \$1.40 a pound and the subgallate at \$1.55 per pound.

Thanking you for the interest you have taken in this, I am, respectfully yours, H. L. W.

The Third Letter.

Jersey City, N. J., June 14, 1909.

Mr. W. L. W.—Allow me to thank you for your prompt reply. The wholesale quotations on the Bismuth salts and the special price to your customer explains matters.

We also must make concessions at times. It seems to me this N. A. R. D. price mark is a means of bringing the North, East, South and West into closer touch and to create good-fellowship, and I hope you share this opinion.

The N. A. R. D. certainly has golden opportunities for every one; and it is hard to understand why so many stand aside and look on.

There certainly should be no skepticism about the merits of the N. A. R. D.

One of my sons, 22 years old and a graduate of the N. Y. College of Pharmacy, would like to see a part of your country and gain experience. Should you be in need of an assistant some time in the spring of 1910 and could offer him an opportunity, I would only be too glad to send him down to Texas. Fraternally yours, F. A. B.

Good Cheer from Texas.

San Antonio, Texas, June 22, 1909.

Mr. F. A. B.—In reply to your recent letter, I beg to say I am also a member of the N. A. R. D., and of course that is sufficient to indicate how much I think of it. It is O. K. in every way.

If I have an opening soon and your son still wishes to come to Texas, I think we can arrange everything satisfactory.

I have the leading store here, employing twenty people, and your son would get good experience. Will write you at the first opportunity. Very truly yours, H. L. W.

Possible Results.

What results this one particular exchange of courtesies will have of course remains to be seen, although we can see in it the bond of fraternalism, the spirit of getting together, and general feeling of an uplift movement.

It may result in a more thorough scanning of price lists and a reason be found why New Jersey pays \$1.80 a pound for Bismuth Subnitrate and Texas only \$1.40.

When the young man shall find employment in the Texas pharmacy, he does not come as a total "stranger in a strange land," but he comes as the son of an N. A. R. D. member, and that removes half of the sting which a new employee generally feels.

Another result may be that Mr. W. will pack his grip and attend the Louisville convention, a matter he possibly had not given serious attention before, for the bond of friendship and brotherhood, even if originated by correspondence, often does stranger things than this.

And all on account of the N. A. R. D.'s effort in preparing a most commendable and efficient prescription pricing schedule.

CHAPTER XVI.**Two From Mississippi.**

The Price Drug Co., at Brookhaven, Miss., write as follows:

"We would like to see what our N. A. R. D. friends would charge for the following prescriptions:

"Our neighbors think our price is high. We never miss a copy of NOTES and do not see how we could do without it.

R Ingluvingr. 1000
Pepsin, scalegr. 200
M. ft. chart. No. 100.

Sig.—One, three times a day, after meals (1 t.i.d.p.c.)."

The charge for this is \$4.00, which cannot be properly called high-priced. According to the N. A. R. D. schedule, the price would be \$4.30, as follows: Cost of material ($2.15 \times 1\frac{1}{2}$) \$3.25, + container 5c, + fee \$1.00.

Proprietary Packages.

Care must be exercised in pricing proprietaries of the above kind, as their weight can only be ascertained by weighing them.

Not less than 21-3 packages of Ingluvin are required in the above prescription, providing a package contains a full avoirdupois ounce ($437\frac{1}{2}$ gr).

Ingluvin costs 85c per package, hence the actual cost of the amount used is not less than \$1.98 and may be more, according to the weight of the package.

We fail to see why anyone should want to fill this prescription, the making of which consumes considerable time, for less than \$4.00.

A "Odoriferous" Prescription.

R—Resorcinolisgr. xx
Ext. Nux Vomicae.....gr. iv
Ext. Hyoscyami.....gr. iv
Ferri Valerianatis.....gr. viiss
Pepsin (Webber, 1-6000) ..gr. xxx
Pancreatinae3iss
M. ft. massa et div. in caps. No. xv.

Sig.—One t.i.d. $\frac{1}{2}$ hr. a.c. (One three times a day, a half hour before meals.)

For these capsules a charge of 60c is made, and while this has heretofore been a popular price for 15 capsules, the price is too generally gauged by "general principles."

The price, according to our schedule, should be 75c—and it is a fair one; thus: 35c for the compounding fee, 5c for container, and 35c for cost of material ($17c \times 2$).

Low Prices Not Necessary.

If, as this firm says, the neighboring pharmacists consider their prices high, these pharmacists must be getting

ruinously low prices for first-class prescription work.

Don't do it, brothers. No one will thank you for working for nothing. And what do you gain in the end but a hand-to-mouth existence, an indifference to good work and unnecessary competition that only produces strife?

Neither of these three mentioned conditions can be your desire. Your desire should be to give the best possible service. No business man can long do this at a cheap-service price and live as he should. That is self-evident; therefore, give quality and service, first, last and all the time—and charge accordingly.

CHAPTER XVII.

The following prescription affords a good illustration of what different operators will do with the same prescription. It was put up by L. R. Shiflett, at Woodlawn, Ala., the charge being \$1.25. What do others think of the price?

R—Ingluvin3iii
 Bismuth Subnitratis.....3ii
 Cerii Oxalatis.....3i
 Peptenzyme Elixir, q. s. . .f3iii
 M. Sig.—Two teaspoonfuls in water, every 3 hours.

The price to be charged for this prescription is \$1.45 according to the N. A. R. D. schedule, as follows: Compounding fee, 25c, container 5c, and material \$1.15 (cost 58x2). This is naturally an almost prohibitive price, but it forcibly illustrates the great need of active propaganda work.

Reduce First Cost, Not Fee.

No amount of reasoning or argument can be brought to bear that will not allow the pharmacist the small fee of 25c for preparing this mixture. Our efforts should therefore be in the direction of reducing the cost, and this can only be accomplished by putting into the hands of the physician standard official preparations that are therapeutically effective and which will prevent our charging such high prices for the sole benefit of the nostrum-maker. This preparation should be prepared in a mortar, a smooth paste

being first made with a small quantity of the Elixir, that the mixture may be free from lumpiness.

The method of introducing these powders into a bottle, adding the elixir and incorporating by shaking, never produces as elegant a mixture as the mortar-method.

A Troublesome Mixture.

The following prescription has been sent in by A. G. Gibbons, Anamosa, Iowa. It refuses to make a clear mixture, with which the customer had been previously supplied:

R—Cocainae Hydrochloridi..0.50
 Mentholis2.00
 Camphorae1.00
 . Misce ad liquidum.

A clear mixture is only possible by using the alkaloid cocaine and not the hydrochloride. The physician's consent should be obtained to making the change, if a clear mixture is wanted.

The price to charge for this prescription is 50c, as follows: Compounding fee 25c, container 5c, material 20c (cost, 9x2).

The "Book" Prescription.

R—Extract. Leptandrae3i
 Extract. Hyoscyami...gr. xlv
 Extract. Rheigr. xxx
 Podophyllinigr. xxx
 Capsici pulv.gr. xxx
 Make 60 pills.

This recipe, undoubtedly taken from a medical formula book, was filled by Walters & Son, Buffalo, N. Y., for 85c, being a special price for good and sufficient reasons.

60 Pills for 25c?

The customer stated that a competitor had filled it for 40c at one time and that another druggist had filled it for 25c. These latter two statements would almost lay the customer open to the charge of stating something untrue, for we doubt if any sane druggist, in the ordinary course of business, would make 60 pills for 25c, no matter how fierce the competition or how rapid he may be able to work.

If any occasion existed for such a low price, dispensers should be chari-

table enough to make the customer a present of the pills, then they would at least retain the respect of their fellow craftsmen.

These 60 pills should cost \$1.15, according to the N. A. R. D. schedule, thus: Compounding fee 80c, container 5c, material 30c (cost 14x2).

By your skill do you thrive. It is just as senseless for a pharmacist to work for little or nothing, as it is for any one else, either professional worker or artisan, to do so. It is for this reason, more than any other, that timid, low price pharmacists are existing from hand to mouth and are constantly worrying about the payment of bills. We must ignore the existence of such conditions entirely if we ever intend to be paid "for services rendered."

An Impossible One.

The following prescription from C. A. Williams, Greenville, Ky., will not make a clear solution. The physician who wrote it stated that a competitor of Mr. Williams has made a **perfect** solution with it.

R—Ferri Sulphatisgr. 640
Sulphurisgr. 640
Magnesii Sulphatis...gr. 60
Acid Nitro-Hydrochlor. a trace
Aquaef3xvi
M. ft. solutio.

No solution of the sulphur can be effected in the above. A clear preparation is only possible by means of filtration, in which case, the sulphur remains on the filter, and this is evidently what the competitor did.

Prepared thus, 70c should be a minimum price for the mixture, as follows: Compounding fee 50c, Container 10c, material 10c (cost 4x2).

Sulphur is soluble only in carbon disulphide, petroleum benzin, benzene, many oils, ether, chloroform and in the boiling aqueous solutions of alkali hydroxides.

A Fixed Value.

The successful pharmacist, who has given his entire time and energy towards perfecting himself for his life's vocation, justly places a definite value upon his services, which must be paid

for when the public demands that service. The N. A. R. D.'s Prescription Pricing Schedule is based upon such definite service, for the payment of which every pharmacist is entitled.

CHAPTER XVIII.

NOTES occasionally is in receipt of letters wherein the statement is made that the N. A. R. D. price mark is not religiously lived up to.

According to the following communication from a well-known pharmacist of St. Paul, Minn., it would appear that the parties in question are either ignorant of the price-mark, or it was done as a low, mean trick to operate against the druggist who refilled it.

Up To Local Associations.

It should become a duty of every local association to thoroughly discuss the published prescription pricing schedule of the N. A. R. D., and unless good grounds exist for a change, it should be closely adhered to.

This pharmacist received the following prescription recently:

R. Sol. Dobell250 Cc.
Sig. Use as a nasal douche, twice daily, diluted with an equal part of hot water.

The prescription was an original one and bore the copy number of three different stores where it had previously been filled, one at Spokane, Wash., one at Denver, Col., and the third at St. Paul.

The prescription was marked, N. A. R. D., st., consequently our correspondent charged 90c for it, although he would only have charged 75c had it not been marked with the N. A. R. D. mark.

The customer politely told the pharmacist that it had once been filled for 60c and twice for 50c. He had no objection to paying the price but considered it very strange that there was such a great variation in price in different stores.

Price Too High.

In view of the fact that the correct price of this prescription is 50c, ac-

cording to the N. A. R. D. schedule, viz., 35c for compounding, 5c for bottle and 10c for material, it would appear that the local association in every city should give more attention to the schedule as one of their activities.

This schedule should be hung up on the prescription case, in the most convenient place. Calculations are quickly made from it, when the cost of the drugs are known.

Our correspondent would also like to know if it is customary to return the original prescription to the customer, stating that he always retains the original for filing and gives a copy with the N. A. R. D. price mark.

Returning Original Prescription.

It is the custom in many stores to return the original, but is a very bad custom, surely. This custom has often placed the pharmacist in a bad light in those cases where a court decides whether a mistake has been made or not.

It would appear that common sense alone would forbid the returning of an original prescription when it has once been filled, for the sake of the protection it affords.

The pharmacy laws of many states expressly state that the registered pharmacist should keep the **original** on file, and we can see no reason why the pharmacist so willingly side-steps such an important statute, that is for his own protection and which can so easily be lived up to with a little diplomatic display of salesmanship.

From Mississippi.

R

Oil Turpentine	minim xxx
Iodine	gr. i
Phenol	gr. iv
Oil Gaultheria	minim ii
Alcohol	f 3i
Glycerin	f 3ii
Compound Digestive Elixir, N. F.,	
to make	f 3i

This prescription contains just about enough alcohol to dissolve the Oil of Turpentine, but the amount of water present is sufficient to throw the greater part of the oil out of solution, in

fact, prevents it from dissolving to a permanent clear mixture.

A presentable mixture can be prepared by emulsifying the Oil of Turpentine as directed in the official Emulsion of Oil of Turpentine, N. F., and adding to this enough Compound Digestive Elixir to make $\frac{1}{2}$ oz. The Iodine, Phenol and Oil of Gaultheria are dissolved in the Alcohol, this solution is mixed with the Glycerin and the whole then added to the previous mixture and thoroughly incorporated by agitation.

Cataplasm of Kaolin.

Mr. Smith, who sent in the above prescription, also asks for an opinion on Cataplasma Kaolin, U. S. P., claiming that it is too thin and that the Glycerin is inclined to separate, when made according to the official process.

If the Kaolin in this preparation is thoroughly dried and used while it is still warm and the Glycerin is of U. S. P. quality (which it very often is not), a satisfactory paste will result, although considerable muscular manipulation is necessary.

If the mixture were run through a grinder and mixer, somewhat similar to a small sausage machine, a perfect product would result.

Never let an opportunity pass by when you can convince your physician or your customers that you are a "master pharmacist."

CHAPTER XIX.

Skill and knowledge will overcome almost any prescription difficulty. This is well illustrated by the following incident, a similar one probably having fallen to the lot of most pharmacists. B. F. E., a pharmacist in Richmond, Va., received the following prescription:

R	Tinctura Ferri chloridi.....	f 3ii
	Spiritus Aetheris Nitrosi.....	f 3vi
	Mucilaginis Acaciae.....	f 3xii
	Syrupi, q. s. ad.....	f 3iv
	M. ft. mist.	

Sig. A teaspoonful in a glass of water every two hours.

After mixing it six different ways,

he finally gave it up and called for help.

At first glance this looks like an impossible and incompatible mixture, and a clear mixture seems out of the question, as Alcohol and Mucilage of Acacia are bitter enemies, pharmaceutically, and always liable to cause trouble in a mixture.

If the Mucilage is mixed with the Iron tincture, a semi-solid gelatin-like mass is formed, and if mixed with the Sweet Spirits of Nitre, a ropy, rubber-like precipitate results.

A Way Out.

Such being the case, we must in some manner assist the Mucilage to overcome the difficulty and the Syrup present offers the opportunity.

By mixing the Mucilage and Syrup first, thus diluting the Mucilage, and then very slowly adding the other two ingredients (previously mixed), a clear and bright ruby red mixture results.

This mixing is best done in a mortar, as then the mixed alcoholic liquids can be added very gradually from the graduate, and the mixture stirred constantly.

It is important that the addition of the alcoholic mixture be very slow, in order that the Acacia may gradually become "acquainted" with it—that is, giving the Mucilage time to overcome the destructive action of the alcohol.

This prescription should cost 50c, as follows: 35c for the compounding fee, 5c for container and 10c for material (cost, 6c, x 2).

A 28% Narcotic Ointment.

The following prescription has been sent in by A. W. L., from Andover, Mass., for pricing, etc.:

R Acid, Gallici 3ss
Ext. Opii
Ext. Belladonnae, aa..... 3iiss
Ung. Simplicis..... 3jiss
M. ft. ung.
Sig. Apply locally.

This prescription should be put up for \$1.65, according to the N. A. R. D.'s prescription pricing schedule, as follows: Compounding fee 35c, jar 10c, material \$1.20 (cost 61c, x 2).

The Extracts are first softened with a small quantity of Diluted Alcohol,

after which about three drams of the Simple Ointment is incorporated into them. Then the Acid is added, mixed well, and finally the balance of the Ointment.

The Acid should not be added directly to the Extracts, on account of the chemical change which would result from the action of the Acid on the partially dissolved alkaloids in the softened Extracts.

This reaction does not occur through a medium of fats, or at least only in a slight degree.

That Mississippi Prescription.

Commenting upon Mr. Smith's prescription, as given in the previous chapter, a druggist in Savannah is quoted as follows:

"The following process will doubtless give the desired result, a clear mixture: Dissolve the Oils, Phenol and Iodine in the Alcohol, add the Glycerin, triturate with 40 grains Talcum, add the Elixir, one-quarter at a time, stirring constantly and filter."

This will produce a clear mixture all right, but some of the Turpentine will remain on the filter.

J. F. McNulty, Jr., P.D., of Belmar, N. J., commenting on Mr. Smith's prescription, writes thus:

"Dissolve the Iodine in the Alcohol, in a mortar, add the Oils, five drops of Liquid Phenol and triturate to a homogeneous mixture. Now add the Glycerin and continue the trituration, adding gradually the Elixir. This makes a good mixture, but it stays cloudy. After standing twelve hours it becomes lighter, and after sixteen hours most of the color has disappeared and a whitish froth appears at the top of the mixture that readily incorporates when agitated. I hope this may help a fellow pharmacist. I never miss reading NOTES from cover to cover each week."

So it appears that a clear mixture which would actually represent the prescription cannot be prepared, thus substantiating the position of the author as previously stated.

The Art of Pharmacy.

The making of pill masses is often a most trying ordeal for the pharmacist,

and few indeed are so fortunate as to be able to say, "I have never been at a loss for a method of procedure."

The following prescription will doubtless be a puzzler to many:

R Creosoti,
Guaiacolis, aa, minim 50.
M. ft. pil. No. 50, S. A.
Sig. One pill after meals.

When the physician wrote the letters, "S. A.," in the above, he knew that "according to art" was necessary in making this pill. A good pill is made as follows:

Into your pill mortar pour the Creosote and Guaiacol and add 100 minims of Tincture of Tolu; then make a plastic mass with Calcined Magnesia. Now by adding a small amount of a mixture of equal parts of Powdered Soap, Licorice Extract and Pepsin, an elegant pill mass is obtained.

The charge for these should be 85c, as follows: Compounding fee 70c, container 5c, material 10c (cost 5c, x 2).

Substances similar to the above, as Eucalyptol, Terpinol, the essential oils, etc., are proceeded with in a similar manner in making them in pill form.

Should that time come when you are at a loss as to how to proceed, act upon the statement of an old college professor, who said, "Boys, if you ever have a cantankerous mass that will not stick, use bread crumbs."

CHAPTER XX.

One of the most important duties of the pharmacist and upon which his reputation to a great degree depends is his ability to decipher a poorly written prescription and divining the intention of the prescriber.

Three Pointers.

Studying the prescription files is excellent practice towards becoming perfect in this respect. A knowledge of the therapeutic action of drugs is also valuable, as it gives the druggist a fair idea of the prescriber's intention.

To illustrate this, it must be borne in mind that a prescription may consist of four parts, and generally does: First, the physician prescribes the main drug, or the "basis" of the pre-

scription; second, he prescribes an "adjuvant," to assist or modify the action of the principal drug; third, he prescribes a "corrective" or "flavor," to make the dose palatable, acceptable to the stomach, etc.; and fourth, he prescribes the "vehicle," to make up the necessary quantity.

For instance, in the following prescription, the Strychnine is the basis, the Potassium and Sodium salts are adjuvants, or vice versa, the Syrup of Orange is the corrective and the Cinnamon Water is the vehicle.

R
Strychninae Sulphatisgr. i
Sodii Salicylatis3viii
Potassii Iodidi3iv
Syrupus Aurantii3iii
Aqua Cinnamoni, q. s. ad...3viii
M. D. Sig.—One teaspoonful four times per day.

By studying your back numbers of prescriptions on this principle, you will get most valuable experience as to the various drugs used as adjuvants, and this will solve many an otherwise perplexing problem in poor writing.

Another valuable feature connected with this part of a pharmacist's work is a reliable, complete and up-to-date directory of physicians in his territory. This directory should contain name, address, telephone and hours, and thus a quick and ready means is at hand for reaching the doctor in case further instructions are necessary in the filling of a prescription.

The fee for the above prescription should be 90c, as follows: Compounding fee 45c+container 5c+material (cost 20c, x 2) 40c.

The "Shake" Label.

A similar prescription has been put up by most druggists at some time or other and it is possible that a very important caution would be neglected if attention were not called to it. This is the neglect to attach a "shake label" to the bottle containing the mixture, and this would often become a serious matter if omitted, were it not for the fact that most people have an unconscious habit of shaking a bottle before pouring medicine from it.

For the sake of safety it is always best to put a "shake label" on every mixture containing Strychnine, for this alkaloid is more readily precipitated than any other.

Bromides and Iodides always precipitate it from aqueous solution, and the lack of a "shake label" might make the last few doses of the above mixture poisonous ones.

Aromatic Elixir would be preferable to the Syrup of Orange and the Cinnamon Water. At least, it should be used in sufficient amount that the mixture may contain 10% of Alcohol, which amount will prevent the precipitation of the alkaloid.

Observing Precaution.

Even such a preparation as the official Elixir of the Phosphates of Iron, Quinine and Strychnine can be dispensed with a "shake label" to advantage, as the following case will indicate, such cases being of frequent occurrence:

An eight-ounce prescription of the Elixir is dispensed and the medicine stands exposed to the sunlight in the patient's home and soon a dirty brownish-black sediment appears which may contain Strychnine.

This always occurs where the patient is irregular and careless in taking his medicine and an eight-ounce portion may last six or seven weeks.

Many pharmacists find it convenient and a time-saver to keep on hand, stock solutions of the more frequently used alkaloids. To prevent deterioration and the formation of growths in these solutions, 10% of Alcohol should be added to them and they should be filtered through cotton into a perfectly clean bottle.

Something in Knowing How.

The following prescription offers an opportunity for displaying some skill in manipulation, that has its reward in the production of a presentable mixture:

R

Tinctura Myrrhae \mathfrak{z} iii
Potassii Chloratis \mathfrak{z} iii

Glycerinae \mathfrak{z} i
Acidi Carbolicigtt. viii
Aqua distillatae, q. s. ad..... \mathfrak{z} viii

M. ft. garg.

D. S.—Gargle every hour.

The resin of the Myrrh will invariably separate and stick to the sides of the bottle containing the mixture, unless the proper precautions are observed.

The Glycerin and Tincture of Myrrh are first mixed, preferably in the graduate in which they are measured, and then slowly added to the solution of Potassium Chlorate (completely dissolved in the full amount of Water, $6\frac{3}{8}$ oz.) with gentle, not vigorous, shaking. This will produce a presentable mixture, although if the prescriber's consent can be obtained to substitute pure Honey for the Glycerin a most excellent preparation will result, one that is fairly permanent and not liable to separation.

A Valuable Rule.

In this connection the following is valuable in regard to the mixing of alcoholic with aqueous solutions:

When the mixing will cause a pronounced turbidity or precipitation as a foregone conclusion and as happens in the above case, add the alcoholic solution to the aqueous solution, slowly and with constant agitation, in order that the precipitate may be as finely divided as possible.

If turbidity is to be prevented or can be, reverse the operation and gradually add the aqueous solution to the alcoholic, stirring or agitating constantly, according as the operation is performed in a mortar or a bottle.

In this manner the alcoholic solution becomes weaker gradually, and is the method to be employed in making such preparations as Bay Rum, Aromatic Elixir, etc.

A careful observation of this simple fact will solve many a difficult problem in laboratory work and is one of the many "small things" that makes a capable pharmacist and quality preparations.

CHAPTER XXI.

Pharmacists should never lose sight of the fact that the active exploitation of the official medicinal preparations of the U. S. P. and N. F. has a most pronounced effect on their prescription receipts, as concerns the net profit.

Propaganda work of this nature changes the entire nature of the prescription from one of secrecy to that of non-secrecy. The profit goes to the pharmacist instead of the nostrum maker, the cost is almost always less to the patient and the net profit for the pharmacist is always greater.

When full bottles of a proprietary article are prescribed, these should never be dispensed in the original bottle (with the name blown in the glass), unless absolutely specified by the physician. It is not required of a registered pharmacist to advertise anyone's bottle or the medicine contained therein, and the empty bottle should be broken.

Cause of Prescription Peddling.

Because this is not done as often as it should be, it has led many people to prescribe for themselves and has been a great factor in the peddling of prescriptions, much to the detriment of the physician himself, and is one of the many reasons why the U. S. P. and N. F. propaganda was instituted by the N. A. R. D.

The pharmacist can also readily understand why this "original bottle" prescription has led many people to believe that a pharmacist is not able to put up his own medicines and that consequently the physician must prescribe some one else's.

Therefore such "little details" should have the pharmacist's careful attention, and his plan should be to constantly work towards such an end as will make him the originator or creator of medicines, instead of simply a retail distributor of medicines.

An Expensive Prescription.

℞

Bismuthi Subnitratiss3vi
Pepsini pulv. (Fairchild).....gr. xv
Papoid3ss

Pancreatini (Fairchild).....3i
Taka Diastase (P. D. & Co.).....3i
Sodii Bicarbonatis.....3ss
Zingiberis pulv.....gr. iii
M. ft. pulv. No. XV.

Sig. One powder before meals.

The above prescription was put up by Huebner & Van Delden, Chicago druggists, for \$1.25 and a copy was given to the customer, with the N. A. R. D. price mark upon it, "phm." On the next visit to the above firm this customer stated that she had this prescription filled at another place for 85 cents.

This price, 85 cents, either proves that the druggist charging it is lamentably weak on the cost price of the proprietary articles used, or it proves that they were not used at all. We would hardly suppose that he is in business for his health, for the wholesale cost of the above ingredients alone is 58 cents.

According to the N. A. R. D. prescription pricing schedule, the charge should include 35 cents as a compounding fee, 5 cents for the container and \$1.15 for material (58 cents cost \times 2), a total of \$1.55.

While this price may look unreasonably high to a customer for a 15-powder prescription, it also shows the supreme importance of active propaganda work in order that many useless nostrums and high-priced proprietaries may be replaced by equally good or better official preparations, thereby making conditions better for the patient, the pharmacist and the physician.

A Troublesome Mixture.

The Standard Drug Co., of Seattle, Wash., sends in the following prescription for comment, stating that the Sodium Benzoate makes a thick mass with the Elixir:

℞

Hexamethylenaminae3ii
Sodii Benzoatis.....3iii
Elixir Five Bromides, q. s. ad.3iv
M. D. S. 3i four times per day.

Not knowing what the Elixir of Five Bromides may contain, it is rather dif-

ficult to locate the trouble. If it is simply a solution of various Bromides in Aromatic Elixir, this may be at fault in not taking up the Sodium Benzoate.

By dissolving the Hexamethylenamine and Sodium Benzoate in a small quantity of Water, about five fluidrams and then adding the Elixir to this gradually, a clear solution will be obtained, which remains permanent.

It frequently happens, as in this case, that an Elixir will dissolve no more salts, because of the insufficient quantity of Water present in the Elixir; for this reason the additional salts should first be dissolved in a minimum amount of Water and then the Elixir gradually added.

Two Pointers.

1—It very frequently happens that a very hard ointment or ointment base is to be mixed with a softer one. In such a case, the hard ointment should first be kneaded or incorporated with a small quantity of the softer one until thoroughly mixed and then the remainder gradually added and triturated. This is also the method of procedure when liquids are to be incorporated with ointments.

By proceeding thus, the harder ointment becomes somewhat softened by the kneading process, rendering further mixing much easier. The hard ointment may also be melted, if its character is not altered thereby.

2—It often happens that a quick, efficient way of benzoinating lard or ointments be available, and the following method gives excellent results: Dissolve one ounce of powdered Benzoin in two ounces of Ether, filter this solution into an evaporating dish containing one ounce of Olive or Castor Oil, mix well and allow the Ether to evaporate.

This produces a solution representing 100% of Gum Benzoin in a fixed oil, which may be incorporated with the lard or ointment, and used in the proportion of ten minims to the ounce, about 2%.

CHAPTER XXII.

Probably the most important factor in the pharmacist's art is the ambition to perfect himself in the compounding of prescriptions. Few realize how important it is to make use of such a journal as the N. A. R. D. NOTES in spreading information that pertains to the compounding of physicians' prescriptions.

It is not enough to ask for information alone, but when something new turns up, as happens so often, the information should be sent in to your drug journal in order that others may get whatever benefit there is attached to it, thus practicing the "live and let live" policy.

The pharmacist, whether he is busy or not, often finds it exceedingly difficult to keep up with the continuous increase in the newer remedies of very complex character, many of which, however, will never amount to anything, being simply nostrums.

This is owing to a lack of time or opportunity to consult current literature, hence an important service might be rendered through NOTES, if pharmacists will send to this journal for discussion, such specimens or prescriptions as may offer special consideration or manipulation to produce presentable preparations, or peculiar pricing features.

A Louisville Prescription.

The following prescription was sent in by a Louisville (Ky.) pharmacist, which, after repeated trials, produced a fine, clear mixture:

R—Acidi Salicylici gr. xxxii
Hexamethylenanimae ʒiii
Syrupi Asari Compositi f ʒi
Aquae Distillatae, ad f ʒiv
M. D. Sig. One teaspoonful every two hours.

The first time this prescription was sent out it had a shake label attached, as the Salicylic Acid was added last and naturally did not at once dissolve. When the bottle was returned to be refilled, (with the doctor's express permission), about three teaspoonfuls were left in the bottle, but this was perfectly clear.

Upon being questioned the customer stated that he shook the medicine well each time before taking it and that during the second or third day it became perfectly clear.

This led our Louisville pharmacist to believe that a new salt, evidently Hexamethylenamine Salicylate, was formed and which was soluble in water, and such indeed is the case.

The Acid and the Hexamethylenamine were then triturated together in a mortar, the Water was gradually added and a perfectly clear mixture resulted, to which was finally added the Syrup.

An Explanation Necessary.

It was explained to the customer that this was one of those preparations that act in such a manner and that this second time he had used heat in preparing it, thus making it clear at once. This method, of course, could also be used. This explanation satisfied the customer.

Some satisfactory explanation should always be made to your patrons in similar cases, even going to some length in doing so. You should do this, because, in the first place, you should always feel it your duty to dispense a medicine in its most palatable and presentable form, and second, the explanation to your customer will, if gone about in a diplomatic manner, really increase his faith in you, as you can impress him with your knowledge of the facts in the case.

The charge for this prescription was 55c, which is a fair and correct charge, and in harmony with the schedule.

The two following prescriptions were put up by a Minnesota drug firm;

R—Potassii Bromidi,
Sodii Bromidi,
Ammonii Bromidi, aa.....30.0
Sodii Boratis50.0
M. ft. pulv. No. 50.

Sig. One powder as directed.

R—Tablet Sajodin No. 50.

Sig. Use as directed.

The first prescription was filled by the above firm for \$1.25 and a competi-

tor filled it for 90c. The second was filled by this firm for \$2.00, while the rival in business filled it for \$1.25.

Such conditions as this represents are truly unfortunate and all too common, and are very far removed from the policy of "live and let live" that should be practiced by all honorable pharmacists.

In the former case the schedule price for the 50 powders should be 95c, as follows: 70c for compounding fee, 5c for container and 20c for material (cost 9c, x 2). Therefore, this firm's charge could be considered somewhat high unless local conditions would warrant the increased charge.

In the case of the Sajodin tablets, however, the competitor evidently had no knowledge of their cost. These proprietary tablets cost 45c per tube of 20 (8 grains in each tablet), or \$1.13 for 50 tablets. The price charged for these by the above firm, \$2.00, is therefore correct and can not be considered too high.

A Creosote Prescription.

The following prescription was sent in by a New York City pharmacist for comment and pricing:

R—Asafoetidae3i
Salolisgr. xl
Creosoti3ss
Extracti Valerianae.....3ss

M. ft. capsul. No. 20.

Sig. One before meals.

To prepare this, reduce the Salol to powder, add the Extract and Asafoetida, mix thoroughly and put into capsules (No. 1). Then drop one and one-half minims (3 drops) of Creosote into each filled capsule and seal in the ordinary manner.

To make into a mass, which, however, is not so desirable, and takes a larger capsule, take Calcined Magnesia (about 120 grains) and thoroughly mix the Creosote with it, then add the other ingredients and finally a very small amount of Glycerite of Starch to make the mass.

The correct price to charge for this is 60c, as follows: 40c for compounding fee, 5c for container and 15c for material (cost 7c, x 2).

CHAPTER XXIII.

Who owns the prescription after the pharmacist has filled it? This question has been settled many times, and still it is as much unsettled as ever. Cases in regard to ownership have been tried in court, with various results, some judges ruling that it belongs to the druggist, while others rule that it is the patient's property.

The fairest kind of common sense judgment would seem to indicate that the pharmacist should of necessity be its guardian, not to say owner. The patient buys the doctor's professional knowledge and the written order should belong to the physician who made it or to the pharmacist to whom it is sent; it should never be considered the property of the patient. In any event, however, the pharmacist should be the custodian or guardian of the prescription or written order, which practically amounts to ownership, for the sake of protection to himself and to the physician.

Many state laws recognize this fact by containing a clause in one of the sections that reads somewhat as follows: "That such prescriptions as contain poison shall be preserved by the pharmacist," and this is naturally a subject of the widest interpretation.

The Logical Owner.

The court should in every case at law decide that the pharmacist or physician is the legal owner or, at least, that the pharmacist is the legal custodian, and any other decision is unjust.

However, the point at issue is not what a court may decide, but how the pharmacist may best preserve his rights without offending the customer.

The desire on the part of the customer to retain the prescription, or a copy of it, is very likely owing to his belief that if the medicine does any good, he will keep on using it, at a later date, in a possibly similar instance and thus save the physician's fee. This is exactly what he has no right to do, never having purchased such a right.

He apparently sees no difference in having the same prescription repeated

again and again and in taking the same kind of proprietary medicine from time to time.

He does not seem to realize as yet that a prescription is intended to cure or relieve some particular ailment from which the patient is suffering at a certain time, while a proprietary medicine is generally intended to relieve or cure many ailments at any and all times.

By working along the lines of such an argument, many customers will undoubtedly see the correctness of the pharmacist's position, not only in so far as keeping the original is concerned, but in refraining from giving a copy as well.

A Proprietary Prescription.

The following prescription was put up by a St. Clair, Mich., pharmacist for a customer who claimed that he had it filled in a New York City pharmacy for 75c:

R—Strychninae Sulphatisgr. i
Elixir Glycerophosphates
Calcium and Sodium
(Wyeth)f. ʒviii
M. Sig.—One teaspoonful three times a day after meals.

The price charged was \$1.50, which is nearly the correct N. A. R. D. schedule price, as follows: 45c compounding fee, 5c for container and 95c for material (cost 47c,x2), total \$1.45.

Many pharmacists do not seem to realize that their charge must include not only a satisfactory compounding fee for work done intelligently and correctly, but also a profit on the ingredients to cover fixed expenses. The lack of this much intelligence on the part of the pharmacist is what causes so many to be forever financially "pinched," and this in turn prevents them from devoting their energies to the higher qualifications necessary to manage a business successfully.

A Deliquescent Mixture.

R—Sodii Bicarbonatisʒi
Alumenisʒi
Sodii Boratisʒi
Acidi Citriciʒss
Potassii Bitartratisʒss
Tabella Antiseptic (Mercuric
Chloride, 7 gr.).....1

M. ft. pulv. et dispense in
No. 00 capsulae.

This prescription was filled by a Minnesota pharmacist, who stated that it would not remain in powder form, but would deliquesce. The physician claimed it had been filled and that the powder form was well retained in the capsules.

As written, the mixture will undoubtedly liquify, or at least become very moist, owing to the great amount of water of crystallization present in the Alum and Citric Acid.

This can be prevented by using Dried Alum (Alumen Exsiccatum, U. S. P.) in place of Alum, and using 264 grains of it, as Alum loses 45 per cent of its weight in the process of exsiccation. A corresponding decrease in the size of the capsule should also be made.

Misuse of N. A. R. D. Mark.

The following prescription, being a copy from a Long Branch, N. J., pharmacist, and marked "N. A. R. D. a t," was filled by a pharmacist in Elizabeth, N. J.:

R—Creosoti (Beechwood)3ii
Spiriti Frumenti, q. s., ad...f ʒviii

M. Sig.—A teaspoonful in a wineglassful of water, three times a day.

The N. A. R. D. price on this would be 80c, the liquor being priced at \$3.00 per gallon. While the N. A. R. D. price mark, as such, may only indicate the value of the letters used, it should also take into consideration as a general thing the method of pricing according to the N. A. R. D. schedule.

This schedule specifically states that a star (*) should be added to the price mark, if for any reason a price is made lower than the schedule would call for.

In the above case the difference between the original charge, 30c, and the correct charge, 80c, is so great as to lead one to think that the N. A. R. D. mark was used fraudulently. The Elizabeth pharmacist compromised with his customer by charging 50c.

Nitrate of Silver Pills.

A Wisconsin firm of pharmacists sent in the following prescription, de-

siring a satisfactory working formula:

R—Argenti Nitratis 1.0
Naphthaleni15.0
M. ft. pilulae No. 100.

Reduce the Silver Nitrate to powder, add two grammes of Pure Talcum and make into a soft paste with Petrolatum. To this add the Naphthalene, previously finely powdered, and enough Petrolatum to form a pill mass.

This forms a good pill which will keep active for a long time. In any pill containing Silver salts (or Potassium Permanganate) the use of the ordinary pill excipients must be avoided. These excipients generally contain organic matter, which reduces the Silver salt and often causes explosions.

The schedule price for these pills would be \$1.15, as follows: \$1.00 compounding fee, 5c container and 10c for material (5c for each ingredient), although the price charged, \$1.50, is none too high, all things considered.

High Price Necessary.

The following prescription sent in by the Lincoln Pharmacy, at Scanton, Pa., brought forth the proverbial complaint about high prices, but the charge, \$2.25, is justifiable:

R—Papoidgr. xxx
Taka Diastase,
Ingluvin,
Sodii Bicarbonatis,
Salol, aa3ii

M. ft. chartulae, No. xxiv.

Sig. One powder after meals.

The cost of the ingredients is 89c, hence the charge for this prescription should have been \$2.30, as follows: 45c for compounding fee, 5c for container and \$1.80 for material (cost 89c, x2).

It is well to bear in mind that when the cost of material approaches the dollar mark, the cost should be multiplied by $1\frac{1}{2}$, instead of by 2.

CHAPTER XXIV.

Some pharmacists consider the pricing of prescriptions in about the same manner and with the same regard for profits as when they put a price on a fountain syringe: Cost 50c, add about

$\frac{1}{2}$, selling price, oh about 75c. This is sheer incompetency or is it possibly an heir-loom handed down from the original pricing on proprietary medicine.

In either case it shows poor, very poor business acumen. It shows as nothing else can the tendency of these pharmacists to keep themselves, and their fellow craftsmen in a measure also, financially poor, with its resulting drawbacks.

What is a Pharmacist?

The proper study of mankind is man and the proper study of the pharmaceutical profession is pharmacy. A pharmacist should thoroughly analyze himself every once in a while and realize what it means to be a pharmacist, what the responsibilities are and what knowledge is necessary to a complete understanding of the art.

If he would do this intelligently, and then discover that he is a person eminently fitted to be trusted with the preparation and dispensing of medicine, he would of necessity also discover that his services are worth something besides charging a fee "to cover running expenses" only.

Is a Pharmacist's Skill Worth Anything?

To illustrate this, let us take an illustration in a different craft and see what services and "knowing how" bring here in the shape of financial reward.

The blacksmith buys horseshoes by the pound, paying six cents a pound for the shoe in the rough. The shaping, fashioning, etc., are done by the horseshoer as is also the process of attaching them to the horse's feet.

The Blacksmith's Profit.

When a blacksmith shoes a horse, his price is \$2.50. The cost of the four shoes, which generally weigh two pounds each, is 48 cents. The price varies in different cities and villages and may often be as low as \$1.50 for shoeing a horse on four feet.

Yet a druggist thinks he must bring an unlimited amount of gall into activity to charge \$1.00 for a bottle of medicine, the wholesale cost of which is 48c.

Which the More Skillful Work?

Is it not more important for a person to pay \$1.50 or \$2.50 for a bottle of medicine that is active and correctly prepared than to pay \$1.50 or \$2.50 for shoeing a horse, **when the charge is based solely upon the skill employed?**

Nobody objects to the blacksmith's charge. If it is customary for the pharmacist to charge small fees, **change the custom** and charge a fee proportionate to the value of the services. And make the public see you are right by **giving** them quality and service and by preaching that fact to them in your advertising. The Prescription Pricing Schedule of the N. A. R. D. is an eminently just one and in the great majority of cases its method of pricing is correct.

From Savannah, Ga.

T. W. Norwood, of Savannah, Ga., commenting upon the N. Y. prescription (see previous chapter), states that "New York is a druggists' health resort. We have always been in business for the other fellow's health and our motto is "charge them according to value received and services rendered; nobody appreciates a cheap job. Notice the following:

R—Strychninae Nitratisgr. i
Pepto mangan (Gude).....Oz i
"Our price on this is \$1.50, while the N. Y. price would be \$1.25."

The correct price is \$2.45, as follows: 60c for compounding fee, 10c for container and \$1.75 for material. One pint of this proprietary costs \$1.12, to the retail price of which 15% must be added: The retail price of 16 oz. of this proprietary at \$1.25 per bottle is about \$1.52; this + 15% = \$1.75.

R—Hydrargyri cum Creta,
Ferri Sulphatis exsic, ää gr. L.
M. ft. pilulae No. 100.

"Our price for these pills is \$1.00 and N. Y. would probably charge 60c. We doubled the amount, making 200 pills for \$1.50."

The N. A. R. D. schedule for making 100 pills is \$1.00, to which must be added 15c, as cost for container and material. The fee for making 200 pills

is \$1.40, and adding cost of material and container, makes the total \$1.60.

An Incompatible Prescription.

Information as regards method of filling, pricing and whether Liquor Ammonii Citratis (B. P.) was not meant in place of Liquor Ammonii Acetatis, in the following prescription is wanted, it being sent in by George Pottinger, of Valley Springs, S. D.

R—
Sodii Salicylatis3vi
Tincturae Ferri Chloridi.....f3vi
Acidi Citricigr.xx
Olei GaultheriaeMinims xx
Glycerinaef3xii
Liquor Ammonii Acetatis,
q. s. ad.....f3viii

M. D. S.—One teaspoonful in water every 2 or 3 hours.

A purple precipitate occurs in this mixture, consisting of Salicylic Acid principally and caused by the action of the Iron Chloride on the Sodium Salicylate and Oil of Wintergreen.

Before being dispensed, the physician should be consulted, as the Salicylic Acid may be objectionable, even though the greater part of it may be

held in solution by the Ammonium Acetate.

CHAPTER XXV.

It happens quite frequently that pharmacists are at a loss to know the meaning of certain abbreviations used by the physician in writing prescriptions, and hence the meaning of a few of the more commonly used ones should be memorized.

The importance of this subject is sufficient to warrant the expenditure of a small sum of money in purchasing a book of some kind that contains a complete list of Latin names, abbreviations, etc., and the corresponding English word or words.

Almost every work on Pharmacy, Prescriptions, Compounding, etc., contains a very complete list, and while it may not be necessary to memorize all, such a list should be handy for quick reference, as a perfect understanding of an abbreviation often assists in the filling of a prescription.

Proprietors should be perfectly familiar with the following and they should also see to it that their clerks know the meaning of them:

Abbreviation.	Latin Term.	Meaning.
a.....	ante.....	before.
ad.....	ad.....	up to.
add.....	adde.....	let it be added.
ad lib.....	ad libitum.....	at pleasure.
admov.....	admoveantur.....	apply.
agit.....	agita.....	shake, or stir.
agit. a, sum.....	agita ante sumendum.....	shake before taking.
alb.....	albus.....	white.
a. c.....	ante cibo.....	before eating.
alt. hor.....	alternis horis.....	every other hour.
amp.....	amplus.....	large.
a a.....	ana.....	of each.
aq. bul.....	aqua bulliens.....	boiling water.
aq. ferv.....	aqua fervens.....	warm water.
aq. font.....	aqua fontis.....	spring water.
bene.....	bene.....	well.
bis.....	bis.....	twice.
b. i. d.....	bis in dies.....	twice a day.
calef.....	calefactus.....	warmed.
cap.....	capiat.....	let the patient take.
caps.....	capsula.....	a capsule.
chart. cerat.....	charta cerata.....	waxed paper.
chart.....	chartula.....	a small paper.
coch. mag.....	cochleare magnum.....	a tablespoonful.
coch. med.....	cochleare medium.....	a dessertspoonful.
coch. parv.....	cochleare parvum.....	a teaspoonful.
col.....	coletur.....	let it be strained.
collun.....	collunarium.....	a nose-wash.
collut.....	collutorium.....	a mouth wash.
collyr.....	collyrium.....	an eye lotion.

cong.	congius	a gallon.
consp.	consperge	dust or sprinkle.
coq.	coque	boil.
c.	cum	with.
d. t. s.	dentur talis doses	give doses like this.
d., or deut.	da, dentur	give, or let it be given.
div.	divide	to divide.
enem.	enema	a rectal injection.
e. m. p.	ex modo prescripto	as directed (after the manner prescribed).
ft.	fac, fiat.	make.
flav.	flavus	yellow.
fusc.	fuscus	brown, dark.
garg.	gargarismus	a gargle.
haust.	haustus	a draught.
hor. som.	hora somni	at bed time.
in p. a.	in partes aequales	into equal parts.
lag.	lagna	a bottle.
lev.	leviter	lightly.
m.	misce	mix.
m. t.	mitte tales	send of such.
ne. tr. s. n.	ne tradas sine nummo	do not deliver unless paid.
non. rep.	non repetatur	do not repeat.
no.	numero	in number.
o.	octarius	a pint.
om.	omnis	all.
pab.	pabulum	food, nourishment.
plac.	placebo	I will please.
p. c.	post cibo	after eating.
p. d.	pro dose	for one dose.
p. r. n.	pro re nata	occasionally.
pulv.	pulvis	a powder.
pyx	pyxis	a small pill box.
q. v.	quam vis	as much as you wish.
q. s.	quantum satis	a sufficient quantity.
q. h.	quaqua hora	every hour.
quot.	quotidie	daily.
renov. sem.	renovetur semel	let it be renewed once only.
rept.	repetatur	let it be repeated.
s. s.	semi	a half.
s. a.	secundum artem	according to art.
ser. ol.	sericum oleatum	oiled silk.
sig.	signa	mark.
sim.	simul	together.
s.	sine	without.
sum.	sume	take, or consume.
t., or tal.	talis	like this.
t. i. d.	ter in die	three times a day.
tere	tere	rub.
ter. sim.	tere simul	rub together.
u. m. s.	utendus more solito	to be used in the usual manner.
vel	vel	or.
ver.	verus	genuine.

Trim Your Labels.

All labels that are attached to bottles or boxes containing prescriptions should be neatly trimmed. The trimming should be close to the outer black border and should be uniform. This includes also the strip labels, such as "shake the bottle," etc. This is only a small matter, but it adds much to the tastiness or appearance of the package, and all such things are important to

the druggist, whose motto is "quality."

J. G. Geiwitz, of St. Joseph, Mo., states that "the Silver Nitrate pills (see chapter 23), schedule price \$1.15, and that \$1.50 (the price charged) is none too high. I agree and would add that any pill should command a price of at least 3c up to one dozen, and never less than 2c even in lots of one hundred.

"The compounding of this Nitrate of Silver pill shows that a pharmacist

must know many special details and be prepared for them, and these things must be paid for. These pills are evidently taken at the rate of three or four a day, and even at 3c apiece would cost the user not over 12c a day, and we should remember, **this is while sick only.**"

A Narcotic Prescription.

The Crystal Pharmacy, at Pensacola, Fla., submits the following prescription for pricing, compatibility, etc., stating that the person who presented the copy had never paid over 40c for it, their charge being \$1.00:

R Tr. Belladonnaef3iv
 Tr. Digitalisf3iv
 Codeinae Sulphatisgr. xv
 Caffeinae Citrataegr. xv
 Syr. Cocillana Co. (P. D. & Co.)
 adf3iv

M. et Sig. Coch. parv. ss. (a half teaspoonful) every 2 to 6 hours. The price to charge is \$1.10, as follows: 35c for compounding fee, 5c for container and 70c for material (cost 36c, x2). Only a person ignorant of prices, or one in business for his health exclusively, would charge 40c for this mixture, as the wholesale cost of the ingredients is practically 40c.

As regards compatibility, this is difficult to determine, as the composition of the specialty used as a diluent is unknown and may or may not precipitate the alkaloids or otherwise defeat the purpose of the prescriber.

CHAPTER XXVI.

The prescription department of a pharmacy is doubtless the most important part of it and it should be treated as such. This applies to all pharmacies alike, whether putting up one or thirty prescriptions a day.

The pharmacist who has but little prescription business will probably not concede this point, but it is a fact, nevertheless, for every prescription business will respond to the stimulus of advertising and thoughtful propaganda work.

Every pharmacist should give his special, careful and personal attention

to this department, and if he has no other hobby, he should make this department one, for after all, it is the man himself, the pharmacist, who is the fundamental requirement in compounding and dispensing. If he has the knowledge, the experience and the apparatus, all things are possible to him.

A Paying Hobby.

No half-way measures as regards cleanliness and order should be permissible here, and as your hobby, your prescription department should be as neat as a parlor. The impression a physician gets from a clean and orderly prescription department is fully as valuable to the pharmacist as that produced upon the public by a clean and well arranged store room.

Almost every person, and the physician is no exception, is attracted by a clean, orderly and systematic arrangement of any kind. It may not be commented upon, but it leaves a lasting impression upon the mind. This impression comes to the front at every favorable opportunity, and a pharmacist should know that the physician has numerous opportunities for recalling a clean and well arranged and well managed prescription department.

No Substitute for Tools.

The greatest mistake a pharmacist can make in the fitting out of the prescription department is in not having proper tools and apparatus to work with. There is no substitute for equipment and apparatus. Spatulas, graduates and mortars are cheap enough to warrant every pharmacist in procuring a full set of each.

An ointment, for instance, can be made much faster, and a great deal nicer, in a proper shaped and proper sized ointment mortar and with a good flexible spatula, than in a pill mortar with a stubby and broken off spatula.

Quality and appearance of a preparation, in addition to the time saved, are important factors in prescription work, and these are only possible when good tools are handy and used properly.

Data for Locating Prescriptions.

While most pharmacists have a satisfactory method of filing prescriptions as they come in from day to day, much delay is often occasioned as regards refilling a prescription, and often times a much needed prescription cannot be filled at all, because it cannot be located from the data given by the customer.

Often a customer will ask that a prescription be put up that has been filled a week or a month ago, and it frequently happens that a refill is asked for as late as a year after it was originally put up.

Probably every druggist is familiar with the labor of hunting through files, the questioning of the customer, etc., in an attempt (often a fruitless one) to locate a certain prescription.

A few minutes' time each day, in preparing a record somewhat on the following principle, will obviate all this trouble, and locate the much wanted prescription at once. An ordinary unruled record blank book will answer for this purpose, ruled as indicated on the bottom of this page.

This simple, yet efficient record should appeal to all druggists who like system and who consider time a valuable factor in business.

Now when the customer comes in who has forgotten the size of the bottle, the number of the prescription, and can only guess about when it was originally put up, you will be able to help him out quickly.

One or more notations on your record will always be the means of locating the prescription. First you ask, "what is the name," next "about when was it last filled," next "what doctor was it written by," etc. The customer

having answered, you turn to your record at the date given, and a hurried glance will at once locate "F. Helmuth," and the further statement according to the record that it was from Dr. Bacon, last filled January 1, 1910, fifteen powders for 50c, and that Mr. Brown filled it, will generally be met with "that's it," from the customer. Such a record can easily be made to fit individual stores. It takes for granted that each refill is counted as a prescription entitled to the next number.

In the fourth column is written the original number in order that the prescription may be found. This column may be omitted if, as in the above case, F. Helmuth's last refill was filed and numbered on a separate blank and in its regular order, the same as a new prescription. This separate blank would be numbered 15794, and would contain the following information: Refill No. 15101, Dr. Bacon, 15 powders, for F. Helmuth, filled by Brown, 50c, charged.

Nothing is gained by this procedure, however, as the original must be found, and if a record is kept at all, it might just as well be complete.

Other Features.

This record might also contain the customer's address and the last column "Remarks" is often a reminder that a charge has not been made in the day book. It also takes for granted that the customer's name and address be written on the prescription.

Such a record also enables the pharmacist to make comparisons of the number of prescriptions filled, either between any two weeks, months or years. The second column is intended for a record of the number of prescriptions (new and refills) filled in the current month, and in many other ways will this record prove its value.

Date	No. of Rx. in month.	New Rx.	Refill Rx.	Doctor's Name.	Customer's Name.	Nature of Rx.	Number of Rx.	Dispenser.	Price.	Total Rx. for day.	Re-marks.
Jan. 1	1	n	.....	Johnson	F. Jones	Eye Salve, ½ oz.	15,786	Smith	\$0.35	..	.....
"	2	n	.....	Jacobs	P. Schoppe	Mixture, 4 oz.	15,787	Smith	.50	..	charged
"	3	..	r (12601)	Schmidt	M. Reichert	Mixture, 6 oz.	15,788	Brown	.85	..	.....
"	4	n	.....	Peters	C. Tompkins	Powders, 12	15,789	Smith	.45	..	by mail
"	5	n	.....	Bacon	F. Rogers	Supposit, 6	15,790	Brown	.50	..	.....
"	6	..	r (14781)	Hipp	C. Bartz	Liniment, 8 oz.	15,791	Smith	.75	..	charged
"	7	n	.....	Johnson	F. Jones	Mixture, 4 oz.	15,792	Smith	.65	..	.....
"	8	..	r (15301)	Peters	S. Sasse	Capsules, 50	15,793	Brown	1.25	..	.....
"	9	..	r (15101)	Bacon	F. Helmuth	Powders, 15	15,794	Brown	.50	9	charged

CHAPTER XXVII.

The pharmacist's code of ethics, as published in a previous chapter in the propaganda department, is meeting with very general approval.

So far there appears to be only one physician who is **not** opposed to the refilling of prescriptions and the occasion is so extraordinary that we feel inclined to publish the facts to this declaration. O. H. Stechmann, Phar. D., of Lakewood, N. J., filled the following prescription, written by a specialist of some kind in New York City:

R—Codeinaegr. iii
 Saccharinigr. i
 Aqua Distillataef ʒiii

Sig.—One teaspoonful every two hours.

In due course of time this prescription was to be refilled, but on account of the prohibitions in the New Jersey law, this could not be done. Neither could a copy be given for the same reason.

The customer insisted that Dr. W. is one of the greatest specialists in New York City, and that it would cost her \$10 to have a new prescription written. She was advised to write to Dr. W. to get his written consent for a refill or a copy, and the following letter was thereupon received by Mr. Stechman:

"The Druggist will be kind enough to give to Mrs. K. a copy of the prescription sent to her by Dr. W. Dr. W. feels that the prescription is the property of the patient and not of the physician or druggist. When a patient pays for a prescription it becomes his or her property. In every country in the world except the United States the original prescription is always returned to the patient and it is wrong that this is not done here.

Dr. W.

A copy was given to Mrs. K. and it was thought advisable to send a copy of the law to Dr. W., and also the reason why such laws were enacted. This law reads as follows:

The Statutory Law.

"Any person who shall fill a prescription of any of the substances, admixtures or remedies mentioned in the first section hereof more than once, or who shall fail to retain and preserve any such prescription

after dispensing the same, for at least five years, or who shall take or permit another to take a copy of any such prescription, shall be guilty of a misdemeanor."

(Section I. enumerates the following: Cocain or its salts, Alpha or Beta-eucaine or their salts, Opium, Morphine, Codeine, Chloral or any derivative of Chloral.)

To this communication Dr. W. answered as follows:

"Mr. O. H. Stechmann, Lakewood, N. J.

"Sir: If you have not given Mrs. Kamber copy of prescription No. 24468 you are requested to send a copy to me at once. I state again, a prescription is the property of the patient; neither physician nor pharmacist has any control over it.

"Your statement with reference to drug habits is silly in view of the fact that this prescription is for a child. Druggists retain prescriptions to prevent their being filled elsewhere, and for no other purpose.

An Erroneous Statement.

"The injustice of such a thing is exemplified in this manner: A patient thousands of miles from home consults a New York physician. The prescription is filled by a New York druggist. This prescription is retained and no copy given. The patient returns home after having taken one small bottle of a useful prescription. He has need of more of the same medicine and discovers he cannot secure it except by communicating with a druggist anywhere from one to three thousand miles away.

"What was Mrs. K. to do in the event of her returning to New York and wishing to continue the same prescription? You say, consult the physician who gave it. She does not desire to pay another fee, which is perfectly right, or perhaps the physician is away on a vacation, or is ill.

"The whole thing is perfectly absurd, unjust and wrong. A prescription is the property of the patient and no one else has any control over it. I always allow patients to get prescriptions filled wherever they wish, but if I knew of any druggist who refused to give a copy of a prescription I should warn everyone against him.

"Dr. W."

A Ridiculous Charge.

Comment on this unusual proceeding is hardly necessary. While there may at times be conditions when a refill is permissible in direct violation of the law, there certainly is never an occasion for a physician to tolerate open violation of the law, as Dr. W.'s statement would seem to indicate.

We believe Dr. W. is the only physician who would make such a remark-

able statement and for that reason it may well be discredited.

This may be an exceptional case, where the end justifies the means, but few people would care to be treated "medically" at long distance. There are too many good physicians in every community to render this necessary.

For Dr. W. to make such a statement as "Druggists retain prescriptions to prevent their being filled elsewhere and for no other purpose," is little short of sublime ignorance of the status of the pharmacist. The case in question certainly contains no grounds for such a charge.

Until more valid grounds for a change are advanced the five rules of our code of ethics will stand as published.

Price Too Low.

The following important prescription was sent in by Mr. Joseph Nussbaum, of Fort Wayne, Ind., who stated that a patron had it filled for 85c:

R—Digalen f 3ii
 Flex. Rham. Pursh. arom... f 3vi
 Glycerinae f 3iiss
 Tr. Nuc. Vomicae f 3ii
 Syr. Aurantii, q. s., ad..... f 3iii

Sig.—One teaspoonful, t. i. d., p. c..

As Digalen Solution costs \$1 per ½ oz. vial, it would appear that this prescription is priced much too low at 85c. The price should be \$1.55, calculated as follows: Compounding fee 30c, + container 5c, + twice the cost of material, \$1.20 ($.60 \times 2$).

Another factor should be considered in pricing prescriptions containing certain proprietary preparations of Digitalis and Ergot and that is, when bottles of such are opened and part of the contents are removed, the remainder is often liable to deteriorate rapidly unless the preparation is most carefully preserved.

A new cork and a cool place, for containers of such preparations, often means a saving of from 50c to \$3.00.

CHAPTER XXVIII.

The statement has often appeared in NOTES and in certain literature sent

out by the Propaganda department of the N. A. R. D., that "the active and intelligent pursuit of the professions of pharmacy and medicine requires more knowledge, more intellectual power and a greater devotion to duty than is ordinarily possessed by one individual human being."

We hope that pharmacists will realize this fact. Study this statement carefully, analyze it, find the truth in it and then practice it. The declaration might well be modified by stating that the pharmacist who has the correct practice of his profession at heart in every particular has a big undertaking in even keeping up with his own art.

Many pharmacists do not realize the great responsibility attaching to their art or profession, and for that reason they make up this deficiency by encroaching upon the domain of the physician—and their trouble begins.

No Excuse for Counterprescribing.

Some of these pharmacists imagine that the possession of some therapeutic knowledge is an argument and an excuse for counter-prescribing, but such supposition is ridiculous. Therapeutic knowledge is far removed from pharmacologic knowledge, diagnosis and treatment.

Because we know that Sodium Salicylate is valuable in acute rheumatism (and the pharmacist should know it), it does not follow that the pharmacist can tell acute rheumatism when he sees it or is able to prescribe for it. This difference should be apparent to the pharmacist and he should "mind his own business."

Therapeutic knowledge is a valuable asset to any pharmacist if used legitimately. It enables him to obtain a clear idea of the therapeutic intentions of the prescriber, and thus it will act as a check against pharmaceutical or chemical incompatibility or error. It broadens the intellect and becomes a plea for a more liberal education on strictly pharmaceutical lines.

The N. A. R. D. Price.

J. H. Ferris, a popular pharmacist in Mitchell, S. D., sends in the following

prescription, asking what the N. A. R. D. price would be:

R—Ext. Digitalis gr. iv
 Ext. Ergotae ʒss
 Strychninae gr. ss
 Ferri Arseniatis gr. ii
 M. et ft. capsulae No. xxiv.

The price would be 65c, computed as follows: Compounding fee 45c, container 5c, cost of material ($7\frac{1}{2}c, \times 2$), 15c. In a prescription like this, the three drugs in powder form should first be thoroughly mixed in the mortar with a spatula and then triturated, and then the extract added. This insures absolute uniformity in the mass.

A Difficult Prescription.

The following prescription was sent by Chas. E. King, the Philadelphia pharmacist, with a request that NOTES' readers decipher it. This appears to be a difficult matter from the reproduction herewith, but it is exactly as it appeared on the physician's prescription.

It was written on very poor checkered paper (that is, cross-ruled on the

R
In formate
In Bello domo
and Strophanthi an ʒi
Sp. Aetheris Nit. ʒi
Flux. Aromatic. q. s. ʒi
My 3 times 3 hrs
Zinn

opposite side) and with a soft lead pencil, which resulted in an almost illegible copy. Who can read it?

Mr. King states that both he and his clerk finally decided upon what was wanted and then telephoned to the physician as to whether their interpretation was correct, finding that it was.

Our interpretation of the prescription would be as follows:

R—Tr. Aconiti,
 Tr. Belladonnae,
 Tr. Strophanthi, aa. ʒi
 Spir. Aetheris Nit. ʒi
 Elix. Aromatic, q. s. ʒiv
 Sig.—ʒi every 3 hours. Dr. Zinn.

We must say, however, that the fourth line is merely guess work, and the only reason for giving it as Spiritus Aetheris Nitrosi is that it seems to fit into the compound "therapeutically," acting in harmony with Strophanthus as a diuretic, etc.

Prescription Records.

Commenting upon the valuable article on prescription records (see page 315), F. H. Coolbroth, of the Highland Pharmacy, Springfield, Mass., submits his plan, which he considers ideal and which does away with the entering of each new and refilled prescription in a book.

No. 1 is the original prescription. When this is filled and ready for filing, the left half of No. 2 is stamped on the reverse of the original by means of a rubber stamp and on the right side of No. 2 in the blank space is immediately inserted the name, also date and price.

Then when this is up for a refill, a blank, No. 3, is made out and filed as

No. 1

R	
Magnesi Sulph. ʒi	
Sig.—As directed	Sawbones, M. D.
1-10-1910	
25c	34115

No. 2

Name	Smith
Date	1-10-1910
Price	25c
Refilled by repeat number	34124
.....	
.....	

No. 3

Date of Refill.	1-11-1910
Refill number	34124
Original number	34115
Doctor	Sawbones
Price	25c

a new prescription with its regular number, 34124. And at the same time this new number, 34124, is entered in its proper place on the back of the original (see No. 2), and all other refills are entered in the same place.

Mr. Coolbroth claims simplicity for his plan. It looks simple and is simple. The original is always used to refill from and this also contains the whole history of the prescription.

CHAPTER XXIX.

The following prescription was written by a dentist and was taken to the Dawson Drug Company at San Luis Obispo, Cal., to be filled:

R

Sodii Boratis	3ii
Acidi Carbolici	3i
Thymolis	gr. x
Glyceriti Acidi Tannici	3i
Ol. Cassiae	Mxx
Ol. Gaultheriae	Mx
Alcoholis	3vi
Misce et filtra.	

Sig. Use as directed, on gums.

Realizing that all the Borax would be filtered out, as it is insoluble in Alcohol, the attention of the dentist was called to this fact, who admitted he had made a mistake and substituted four ounces of Water for a like portion of the Alcohol. The dentist further said that the corrected formula would yield a clear solution and so it will, if compounded as follows:

How to Compound.

Dissolve the Sodium Borate in the four ounces of Water, which should be slightly warmed, otherwise complete solution is not possible. To this add the Glycerite of Tannic Acid, the Glycerin of which keeps the Borax in solution when the latter becomes cool. A chemical reaction also takes place between the Glycerin and the Borate of Sodium, and the resulting compound results in a permanent solution. The Carbolic Acid is added at the same time with the Glycerite. The reaction is complete in a few minutes and is materially hastened by stirring the mixture in the mortar.

The Thymol and the Oils are then dissolved in the Alcohol and this solution is slowly added to the mixture in the mortar with constant stirring, and the whole filtered through cotton.

The price to charge for this prescription is 55c, computed according to

the N. A. R. D. prescription pricing schedule as follows: Compounding fee, 30c, + charge for container, 5c, + charge for material, 20c (cost, 10c, $\times 2$).

A Difficult Prescription.

The following prescription has been sent in by Gay Clark, of Newport, Tenn., who also stated that it was hard to prepare, and a charge of 90c was made for it.

R

Pepsini pura	3iv
Acidi Hydrochlorici dil.	3ii
Aquae, q. s. ad.	f 3viii

M. Sig.—One teaspoonful, after meals.

The correct charge would be 80c, as follows: Compounding fee, 45c, + container, 5c, + material, 30c (cost 15c, $\times 2$), although 90c is none too high.

Pepsin is soluble in about 50 parts of Water, but the addition of the above Acid, materially increases this solubility, and vigorous trituration of all the above ingredients in a mortar for about 15 minutes, will result in almost complete solution. After solution is effected, the mixture should be strained, not filtered, and can be dispensed without a shake label.

Pepsin Information.

Whenever Pepsin and Hydrochloric Acid are dispensed together, it is important to bear the following in mind:

If the pure Hydrochloric Acid, U. S. P., is one of the ingredients, it must never be present in greater quantity than one and one-half per cent of the total volume of the prescription. That is, in a six-ounce mixture, the amount should never be greater than forty-five minims.

If Diluted Hydrochloric Acid, U. S. P., is one of the ingredients, the amount of it must never be greater than four per cent of the total volume, or in a six-ounce mixture, never more than 120 minims, two fluidrams, as in the above prescription.

Reason for Caution.

The reason for the above caution is that when Hydrochloric Acid is present in greater amounts, the proteolytic

activity of the ferment is destroyed very rapidly. This may not be so very important, as Hydrochloric Acid is considered to be a better digestant than Pepsin itself. But when the physician **does** want the action of the Pepsin, he will be defeating his purpose by prescribing too much Hydrochloric Acid.

The following table may come handy therefore, and if too much Acid has been prescribed, it would be policy to communicate with the physician and advise him of that fact:

Volume of Mixture.	Limit of Pure Acid.	Limit of Diluted Acid.
1 ounce.....	7 minims.....	20 minims.
2 ounces.....	15 minims.....	40 minims.
3 ounces.....	22 minims.....	60 minims.
4 ounces.....	30 minims.....	80 minims.
6 ounces.....	45 minims.....	120 minims.
12 ounces.....	90 minims.....	240 minims.
16 ounces.....	120 minims.....	320 minims.

Charge Too High.

R

Lotio Plumbi et Opii, N. F. Oii
Sig. For external application.

This prescription was put up by a San Francisco druggist for \$2, and the customer stated that another druggist had made a price of 50c.

The correct price to charge is \$1.00, computed as follows: 65c for compounding fee, 15c for a container (32 oz. bottle) and 20c for material (cost 10c, $\times 2$).

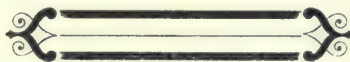
Unless extraordinary and exceptional conditions prevail, \$2 is too high a price to charge for this lotion, which when used at all in contusions, sprains and bruises, is used rather freely and a quart of it is soon used up.

The Schedule.

The Prescription Pricing Schedule of the N. A. R. D. should find a convenient place on the prescription counter of every pharmacy. It can be had for a two-cent postage stamp by addressing the N. A. R. D., at 79 Dearborn St., Chicago. See page 278.

This schedule represents a vast amount of work and is eminently fair and just, and a fairly uniform adherence to this scale will result in correct profits for the pharmacist.

If your present prices are not in harmony with this schedule, a gradual change to it will result in harmony, and better fraternal relations with pharmacists. Send for a copy of it.



Drug Store Business Arithmetic

ARTICLE I.

The very first thing to do in systematizing your business is to find out how much profit you are making on all the goods you sell—that is, actual profit reduced to a percentage basis.

First, you divide your stock into classes, as Rubber Goods, Stationery, Perfumes, Candy, Soda Fountain, Cigars, Soaps, Toilet Articles, Patents, Own Preparations, Drugs and Chemicals, Prescriptions, Wall Paper, etc. Head sheets of paper with these various classes, and on a certain day put down every sale you make, somewhat on the following plan:

Rubber Goods, Sept. 15, 1909.

Article.	Selling Price.	Cost.	Profit.
1 syringe No. 20.....	\$1.25	\$0.79	\$0.46
1 finger cot.....	.05	.03	.02
1 atomizer .....	.75	.42	.33
1 breast pump.....	.36	.19	.16
1 suspensory .....	.50	.27	.23
1 ice bag .....	.65	.37	.28
1 nursing outfit.....	.25	.13	.12
Totals	\$3.80	\$2.20	\$1.60

Your profit on rubber goods is therefore 160/380 of the selling price, or 42%—that is, 42% of your sales is gross profits.

To arrive at a more exact percentage, this itemizing should be continued for a full week, or better still, a week each in January, April, July and October.

This sheet headed stationery will average, say 40% gross profits, cigars, 27%, perfumes 60%, fountain 60%, prescriptions 70%, own preparations 80%, patents 33%, and so on.

Now, having a fairly exact idea of what the average per cent of gross profit is on each class, the next thing to do is to "average up" a month's business.

You have had 3,765 sales during the month, being an average of some 125 a day, and your sheets will show the following as being an itemized statement of these sales:

Sales Record.

Sales.	Article.	Selling Price.	Profit.
290	Cigars	\$30.00	27% or \$ 8.10
120	Rubber goods ...	98.00	42% or 41.16
65	Stationery	22.00	40% or 8.80
35	Perfume	14.00	60% or 8.40
85	Soap	21.00	40% or 8.40
190	Candy	22.00	40% or 8.80
1160	Soda	95.00	75% or 71.25
185	Prescriptions ...	97.00	70% or 67.90
480	Sundries	60.00	35% or 21.00
95	Patents	36.00	33% or 11.88
140	Own Preparations	65.00	80% or 52.00
390	Drugs	28.00	80% or 22.40
82	Paints, etc.....	55.00	36% or 19.80
210	Toilet articles...	45.00	36% or 16.20
138	Miscellaneous ..	62.00	35% or 21.70
3765		\$750.00	\$387.79

Now, dividing your gross profits by your sales (selling price), $387.79 \div 750$, we get $51 \frac{7}{10}$ (to be exact, .51705) the per cent of gross profits on your sales. If you can divide your stock into more than the above fifteen classes, do so, as you want the exact condition of every branch or department of your business.

ARTICLE II.

Having found the **gross profits** on your daily business, as illustrated in the above article, we will next find your per cent **expense** of doing business.

As a basis for calculating, plan your outline as below, substituting **your actual expenses**, etc., in place of the given ones. What **you** are looking for is **your** actual per cent expense of doing business, not a general average, or some one else's average.

Calculations are here made on a drug stock investment of \$3,000.

Your Monthly Expenses.

Rent (or if owner, taxes, repairs, etc.)	\$30.00
Fire insurance (averaged for 12 mos.)	2.50
Heat and light (averaged for 12 mos.)	15.00
License, dues, etc. (av'g'd for 12 mos.)	4.00
Freight, postage, telephone, etc.	3.00
Advertising	6.00
Wear and tea (depreciation of stock, 4 per cent yearly)	10.00
Interest, 5 per cent (you are losing it each year)	12.50
Bad accounts	2.00
Salary for proprietor	125.00
Salary for clerk	75.00
Salary for apprentice	25.00
Miscellaneous (twine, paper, presents, etc.)	1.00
Total	\$311.00

These are the actual expenses that you cannot escape, and they must be paid from the profits of your daily sales.

Now we will see about the daily sales. A fair estimate on the \$3,000 stock will be \$25 per day (but substitute your actual figures), \$25 per day amounts to \$750 per month receipts, or sales. The total expense, divided by the total receipts, $311 \div 750$, equals a little over 41% (to be exact .41466+), and this is the percentage expense of doing business.

According to our previous calculation in Article I, your gross profit is $51\frac{7}{10}$, hence 10.238% ($51.705 - 41.466$) represents the net profits of the month's business of \$750, or \$76.80.

Or, arriving at it in another way, \$387.79 (gross profit) — \$311 (expenses) = \$76.79, the net profit.

You have now a definite way of calculating your percentage of gross profit and percentage of expense. You must be very careful to include all your monthly expenses, for otherwise your figures will be misleading.

We have allowed for depreciation of stock only four per cent, which may possibly be rather low, as it is equivalent to saying that your entire original stock becomes valueless in 25 years. As the greater part of your salable

stock will not be on hand for 25 years, it will be principally the fixtures that cease to be of value in that space of time. If your experience has taught you that your fixtures need replacing sooner, your per cent depreciation must be increased to correspond. However, if your fixtures only become valueless in 25 years and originally cost \$1,000, the 4% depreciation still holds good, (on fixtures) as 4% of \$1,000 = \$40 (a year's depreciation) and $40 \times 25 = \$1,000$.

Interest an Expense?

Interest must be reckoned, as you lose it each year, and if you had not invested your \$3,000 in a drug stock, you would have placed it in a bank, and the interest, at 5%, would have brought you \$150 each year, which you now lose, therefore it becomes an expense.

Of course, this is a debatable question. Some will argue that the profits of the business, placed in a bank, also draw interest, which interest is clear profit, but should not be placed to the credit of your drug business at all, as indeed it should not. The argument then would be that the bank profit is only \$150, while you are deliberately competing with the bank (with your drug stock) to make a greater profit and that, therefore, interest should not be considered an expense. However, we believe it policy to indicate it as an item on the monthly expense budget.

Your salary is certainly also an expense, as much so as that of your clerk, for out of it comes your entire living and amusement expenses for yourself and family.

Some calculators do not figure the proprietor as an expense, but this is not just, as an illustration will show.

Supposing a druggist had a monthly income of \$387.79, as stated in Article I, and store expenses amounting to \$262.79. His books would show a net profit of \$125. But as his salary is \$125 each month, which must be paid from store profits, he has a book profit of \$125 and still not a cent in cash to show it with.

ARTICLE III.

The two previous articles have shown the per cent of gross profits in each particular department of your business and also your percentage of expense of doing business.

The percentages there shown exhibit a healthy state of affairs, as present drug conditions go; generally speaking, the gross profits are not as large as stated in our calculations.

We would impress upon the druggist the fact again and again, that when he has arrived at a correct estimate of his percentage of gross profit and percentage of expense, he must use a standard, simon-pure brand of common sense in an effort to correct the evils shown, if any, and apply the necessary and called-for remedy.

A Lesson in Price Protection.

For instance, in our calculations, we have found that our percentage of expense is 41—that is, our expenses are 41 per cent of our receipts, or in other words, every time we ring up a dollar on the cash register just that often must we pay out 41c for expenses.

There is the most important lesson in the art of price-protection that the retail druggist can learn. This expense is a definite quantity, and no amount of talking, thinking, calculating, mismanagement, or juggling of figures can change it.

In article 1, we have calculated that our gross profit on cigars is 27 per cent. **This means that EVERY time you sell a dollar's worth of cigars, you make a profit of 27c and then you MUST pay out 41c for some expense.**

This is not business. It is business suicide and shows that something is radically wrong. You may console yourself with the idea that you have a sufficiently large business in other departments that pay 80 per cent gross profit to counterbalance your **loss** on cigars, but again we say, this is not business, and sooner or later it will result disastrously.

The idea of possessing a profitable prescription business for no other pur-

pose than paying losses on the cigar business, is a reckless piece of foolishness.

You must apply a remedy somewhere, for no branch of your business should show a smaller gross profit than your expense of doing business.

Applying a Remedy.

As you cannot very well make much more than 27 per cent profit on cigars, you must either reduce your general runnings expenses or throw out the cigars.

The same principle holds good with patents, sundries, paints, toilet articles and miscellaneous, always provided that **your** per cent profit and expense are as quoted in our Article 1. You must get your own exact figures before you can plan a course of action.

There is a stern duty facing you which you must meet and it resolves itself into one or all of the following four conditions:

You must raise the selling price of your unprofitable goods, or buy better; you **must** increase the volume of your business by advertising; you must cut down expense, by working more yourself or you must discontinue selling the profitless goods and direct your energy to more profitable ones.

Another important thing to remember for the average druggist, and where full prices prevail, is that every salesman should represent at least \$20 daily sales.

The Ideal Condition.

The ideal condition to aim at and work towards will be found to be in the direction of prescriptions (for which the N. A. R. D.'s propaganda plan is a good tonic), own make preparations, soda, perfumes and other profitable side lines.

When you have succeeded by means of that great business tonic, advertising, to bring 75 per cent of your business into the "real profit" class, (showing a profit of 60 per cent and over) then and not until then, will the unprofitable sellers cease to be a menace to you.

ARTICLE IV.

Every well regulated drug store has an inventory, for the sake of keeping track of business from year to year, as well as aiding in securing prompt and full settlement in case of loss by fire.

If you will take one actual inventory, then the knowledge of your percentages of profit and expense will act as an automatic means to a perpetually correct inventory, by doing a little calculating each month, according to the following plan:

From your actual and original inventory you prepare the following summary:

Inventory, Jan. 1, 1909.

Fixtures, Fountain, etc.....	\$1,000.00
Drugs, Preparations, etc.....	500.00
Proprietary Medicines	300.00
Cigars and Tobacco	200.00
Rubber Goods, Sponges, etc.....	150.00
Candy, Gum, etc.....	50.00
Stationery	30.00
Soaps and Toilet Articles.....	40.00
Perfumes	50.00
Pharmaceutical Apparatus	60.00
Soda Supplies	75.00
Bottles, Corks, etc.....	85.00
Labels and Printed Matter.....	50.00
Own Preparations	250.00
All other lines, listed separately...	160.00

Total Inventory.....\$3,000.00

Now at the end of the first month after taking inventory, your invoices will show that you have purchased the following:

Drugs	\$ 90.00
Cigars	40.00
Proprietary Medicines	80.00
Stationery	15.00
Rubber Goods, etc.....	28.00
All other lines, listed separately....	147.00

Total monthly addition to inventory.....\$400.00

During this month you have sold \$750 worth of goods from stock at retail, and the cost of these goods must be deducted from the total inventory and a most satisfactory way to do this correctly is by preparing a sheet, simi-

lar to the plan outlined herewith and entitled "Inventory Changes."

To find the cost of the stock we have sold, we take the difference between 100 and whatever the profit happens to be, for instance: the percentage of profit on cigars is 27, therefore, 73 equals the percentage cost of the cigars sold, and so one for all the other departments.

If you sell \$10 worth of cigars your gross profit is \$2.70 and the cost of the cigars (by which your inventory is decreased) is \$7.30.

Changes in Inventory, January, 1909.

Department.	Increase or purchases, as per invoice.	Daily sales	% cost.	Decrease in stock, or cost of goods sold.
Cigars, etc.	\$ 40.00	\$ 30.00	73	\$ 21.90
Drugs, etc.	90.00	28.00	20	5.60
Patents, etc.	80.00	36.00	67	24.12
Candy	25.00	22.00	60	13.20
Rubber goods	28.00	98.00	58	56.84
Toilet articles	45.00	45.00	54	28.80
Own make .....	.....	65.00	20	13.00
Prescriptions .....	.....	97.00	30	29.10
Stationery	15.00	22.00	60	13.20
Soaps	20.00	21.00	60	12.60
Fixtures, etc. ....	.....	.....	*4	10.00
Soda supplies	35.00	95.00	25	23.75
Bottles and corks...	10.00	.....	90	9.00
Printed matter	5.00	.....	100	5.00
Miscellaneous	7.00	191.00	65	124.15
Total	\$400.00	\$750.00	.....	\$390.26

* % yr.

These figures show a net increase of stock for the month of \$9.74, hence the value of your stock at the end of January is \$3,009.74.

As in all our calculations, this sheet should contain each one of the various departments into which your stock is divided.

By way of explanation it may be stated that there will be no increase shown on your "Changes in Inventory" sheet, in "own-make" preparations, prescriptions, etc., because the drugs, bottles, etc., used in preparing them are already calculated under drugs.

Some may think it proper to add labor to the cost of making "own make" preparations, then of course a corresponding increase in inventory would be proper. The item, printed matter, and similar ones that have no selling value are figured by many as an expense and are never entered as "stock on hand."

The Cash Value of U. S. P. and N. F. Propaganda Work

The following table illustrates in concrete form the relative cost of the official preparations as made by the pharmacist (first column), the cost when purchased ready-made (second column) and the cost of proprietaries and nostrums somewhat similar to the official preparations (third column).

Where only one price is given, it is the average price paid. Prices are all by the pint unless otherwise stated. Proprietaries by the gallon are usually from 10 per cent to 15 per cent less than by the pint.

Taking a general average of these it is noted that when the cost of making by the pharmacist is \$1.00 for any given preparation, the cost of the ready-made article will be \$2.26 and the cost for proprietaries and nostrums will be \$5.23.

This should certainly be an inducement to every pharmacist to manufacture his own preparations and let the N. A. R. D. advertise them for him to the physicians.

Official Preparation.	Cost to Make by Druggist.	Cost of Ready-made Purchased	Cost of Specialty
Acetphenetidinum, U. S. P.....	\$1.05 per lb.	See Note 1.	....
Acidum Hydrochloricum Dilutum, U.S.P.	7c	27c	See Note 2.
Elixir Buchu Compositum, N. F.....	38c	61c	\$1.34 to \$1.85
Elixir Corydalis Compositum, N. F.....	65c	75c to 93c	\$2.00
Elixir Ferri, Quininae et Strychninae Phosphatum, U. S. P.....	24c	53c	85c to \$3.00
Elixir Gentianae Glycerinatum, N. F.....	27c	52c	75c to 1.60
Elixir Glycerophosphatum, N. F. Note 3.	16c	55c to 90c	\$1.50 to \$4.70
Elixir Picis Compositum, N. F.....	42c	85c	\$1.34 to \$1.60
Elixir Sodii Salicylatis, N. F. Note 4....	15c	45c	\$1.34 to \$2.05
Elixir Taraxaci Compositum, N. F.....	25c	53c	....
Elixir Terpini Hydratis cum Heroina, N.F.	37c	75c to 82c	\$1.30
Emulsum Phosphaticum, N. F.....	40c	61c	75c to \$1.15
Essentia Pepsini, N. F.....	40c	53c to 75c	\$1.05 to \$2.00
Fluidextractum Rhamni Purshianae Aromaticum, U. S. P.....	80c	\$1.40 to \$1.75	\$1.65 to 2.00
Hexamethylenanima, U. S. P.....	\$1.00 per lb.	See Note 5.	....
Infusum Digitalis, U. S. P.....	5c	See Note 6.	....
Liquor Antisepticus, U. S. P.....	13c	45c	60c to 84c
Liquor Antisepticus Alkalinus, N. F.....	14c	34c to 48c	60c to 75c
Liquor Cresolis Compositum, U. S. P....	23c	45c to 60c	67c to \$1.00
Liquor Ferri et Ammonii Acetatis, U.S.P.	9c	40c to 70c	90c to \$1.20
Petrolatum Saponatum Liquidum, N. F....	30c	53c to 90c	\$3.00 to \$4.50
Pilula Ferri Carbonatis, U. S. P.....	5c per 100	14c to 25c	See Note 7.
Potassii Iodidum, U. S. P.....	....	\$2.05 lb.	See Note 9.
Pulvis Acetanilidi Compositus, U. S. P....	5c per oz.	9c to 17c per oz.	See Note 8.
Pulvis Antisepticus, N. F.....	25c per lb.	70c to 90c per lb.	\$2.50 per lb.
Spiritus Aetheris Nitrosi, U. S. P.....	42c	68c to 90c	See Note 5
Syrupus Acidi Hydriodici, U. S. P.....	10c	53c to 90c	Note 9.
Syrupus Asari Compositus, N. F.....	18c	67c	....
Syrupus Bromidorum, N. F.....	37c	70c to \$1.35	\$1.34 to \$3.40
Syrupus Hypophosphitum Comp., U.S.P.	16c	45c to 67c	\$1.00 to \$1.25
Syrupus Pini Strobi Compositus, N. F....	18c	57c	67c to 90c
Syrupus Rhei et Potassii Compositus, N.F.	25c	58c	75c to \$1.50
Syrupus Scillae Compositus, U. S. P.....	16c	29c to 55c	67c to \$1.50
Syrupus Sennae Compositus, N. F.....	25c	67c	\$1.00 to \$1.65
Tinctura Viburni Opuli Composita, N. F..	40c	65c to 90c	\$1.50
Unguentum Resorcini Compositum, N.F.	4c per oz.	15c per oz.	34c per oz.

Note 1.—Special makes of this cost as high as \$1.85 per lb., and the numerous coal-tar nostrum mixtures cost as high as \$2.30 per oz.

Note 2.—This is not represented by any nostrum on the market, possibly because its taste cannot be satisfactorily disguised. Numerous nostrums purporting to give similar therapeutic action cost as high as \$4.00 per oz.

Note 3.—Many nostrums, so-called organic phosphorus preparations, sell for as high as \$7.00 an oz. Many of these pharmacists must keep in stock in pill form or otherwise.

Note 4.—Numerous nostrums intended to cure rheumatism, often prescribed, cost all the way from 67c per 8-oz. bottle up to almost any price the druggist is willing to stand for. Some so-called coal-tar products selling as high as \$1.50 per oz.

Note 5.—Some makes cost \$2.00 per lb. Nostrums in powder form cost as high as \$1.00 per oz., and liquid nostrums with fancy names re-

lying upon this drug for activity cost as high as \$1.29 per pint.

Note 6.—The various nostrums (heart and kidney tonics) intended to replace this preparation cost as high as \$2.00 per pint and almost all are frauds.

Note 7.—Nostrums containing iron in some form or other as a basic ingredient and calculated to perform remarkable changes in the human economy, cost up to \$1.00 per oz. for preparations in powder form, and as high as 75c per oz. in liquid form. Most druggists must stock these expensive humbugs. Ready-made pills are generally worthless.

Note 8.—Represented by more nostrums than probably any other preparation. Every one is an expensive and harmful fraud and the price is seldom under \$1.00 per oz.

Note 9.—Organic (?) Iodine preparations, many of which are simple frauds, cost from 17c to \$1.60 per oz.

The Value of Organization

It is a matter of history that NOTES, the weekly journal of the National Association of Retail Druggists, has exposed hundreds of fraudulent firms and schemes in its columns.

These exposures were largely made possible because the druggists reporting them were good organization men and loyal members of the N. A. R. D. They believed that in exposing these fakes they were benefiting their brother pharmacists in other sections of the country, and such indeed was the case.

The exposing of fraudulent schemes is a comparatively easy matter if druggists have their organization's welfare at heart and act promptly. A solid organization of retail druggists, whether as a local unit in a city, or as a county association, or as a national organization like the N. A. R. D., is powerful in so far as its individual members are both loyal and active, and working for the common good.

Scheme Promoters.

The promoter of a scheme that is not a first-class business proposition, always finds it much easier to do his work in a town where there is no close or united association of retail druggists, where this scheme employs personal effort or works through the mails.

This is one reason why retail druggists everywhere, even when only two or three druggists are in the town, should be united for mutual protection. Protection and organization work equally well, whether there are three druggists in the local association, or thirty, or one hundred.

When anything of a doubtful character strikes a town, whether brought there by some person or sent through

the mails, a conference should be called and a plan of action, either favorable or unfavorable, mapped out.

In associations having but few members, all members may constitute a committee on trade interests, and either by telephone or by conference, they can quickly decide whether to accept or reject a proposition. In larger associations, a special committee should be appointed for this purpose.

It is safe to say that a promoter who has a scheme about which a committee conference is at all skeptical and which this committee is likely to reject, will in the great majority of cases avoid such a town and pass on to one where the druggists are known to be not so well organized.

Rivalry Should Exist.

This is a feature of organization work that has not received the attention it deserves. It is a well known fact that, other things being equal, what is good for one druggist is good for all druggists. To be sure, there is always competition and rivalry among druggists in a city, and a certain amount of such rivalry is healthy and gives tone to business.

But there are so many outside interests directly opposed to the welfare of all druggists that a solid front should be presented to all imposters. They should act as a unit in safeguarding their own interests.

Organization is a remedy for nearly all the evils in the drug business. Get together first as pharmacists for the protection of your business against outside interests, then the inside interests among the individual members of the association stand a much better chance of being harmonized and brought to a correct and definite working basis.

Routing the Schemer.

The man or firm that comes to the pharmacist with an elaborate plan or scheme of some sort and happens to tackle a good organization man of the kind above mentioned, will have his ardor considerably dampened if he is first respectfully listened to and then referred to the secretary or chairman of a Committee on Trade Interests.

Such a man, if his scheme is at all questionable, and one by which he hopes to line his pocket and that of his firm with easy money, will not linger long in a town when he has analyzed and understands the temper of a well informed organization.

Such a schemer does not care for a too close examination and investigation of his plan, which usually follows when several careful druggists get their heads together and inquire what is desirable and what is undesirable.

A thoroughly organized retail druggists' association is a power in a community, not only in promoting its own business and that of the town, but it is often able to protect the town against other impositions.

Regulating Prices.

Another valuable feature of an organization, large or small, is its power to regulate prices, making prices more uniform and discouraging five and ten cent sales.

This, of course, is inside organization work, after a thoroughly representative organization has been affected. A druggist who is outside of a druggists' association is his own worst enemy, for, single handed, no man ever becomes a power.

There must be unity of purpose in affecting price changes, as in all others. No one can go it alone, for there are so many pitfalls, some affecting the small druggist, some affecting the more prosperous one, and again others affecting all.

There is plenty of money in the hands of the public, to support well every retail druggist in the land. If only a proper and united effort were made to secure it, even the cry about "too many drug stores" would cease.

There really are not too many drug stores, and the fault lies in the fact that druggists are not well enough organized to get all there is waiting to be spent.

An Incident.

An incident in this connection is mentioned by Bro. G. I. Schreiber, a well known pharmacist in Newark, N. J., in a communication to NOTES, wherein he states:

"I once stopped in a drug store in the so-called Hill district and asked the clerk for three Cathartic pills, which was all I wanted. Imagine my surprise when the clerk in an almost pleading voice asked me to 'Please take five cents' worth.' "

"I said, 'Allright,' but could not at first imagine what he meant. It came to me suddenly, however, when I realized that in this district the druggists sold a cent's worth of Flaxseed, three cent's worth of Rochelle Salts, etc.

"I have often noticed in my own store that many a customer will ask for five cents' worth of Rochelle Salts or Quinine without hesitation, and these same customers will apologize when asking for five cents' worth of chocolate candy that is marked sixty cents a pound."

A Sermon on Organization.

There is a sermon in such happenings, as Mr. Schreiber so aptly states—a sermon on organization that it would be difficult to equal. Such cases are all too frequent and are a silent testimonial as to why many druggists are barely existing, living from hand to mouth, and which a live organization could quickly change.

Druggists should learn to look at things in a larger way, should look beyond the confines of the four walls that enclose them the greater part of their lives. They should get together with their fellow-craftsmen, compare notes, realize that the public has money to spend for the druggists' medicines and merchandise, and then evolve some definite and feasible plan of work, in unison, to get this money and prevent it from going to outside

parties, besides getting a fair cash equivalent for your time and knowledge.

Power in Union.

Druggists individually have been too confident of their power in the past and as a result much was lost. The many shining examples of organization success in redeeming much of this lost ground, should be a powerful factor in your affiliating with, and standing by, your local organization through times of peace and war.

By thinking backward a little we realize the good work that has been accomplished by organization against some of the bad practices employed by manufacturers and wholesalers, against that pirate, the cutter, against the free dispensary evil, against the unqualified dispenser, the department store octopus, the graft-seeking legislator, the traffic in habit producing drugs, and the many other unnatural and unjust competitive schemes which rob the druggist of his just desserts.

Victories Won and Lost.

Many of these abuses have been suppressed, only because organized effort was directed against them, it could never have been possible otherwise. Some of these abuses are still in existence, because the druggists are not strongly organized, and they will continue as abuses and grow as such, until the organized force of all the retail druggists is hurled against them.

Many of these victories have been won by organizations numbering less than 20 per cent of the total number of druggists. Some victories are not possible until the entire drug fraternity becomes one compact army. With that a reality, any reform is possible that the druggist may wish.

It does seem that when such beneficial reforms have been accomplished by a limited organization, that every retail druggist will take off his coat, roll up his sleeves and pitch in and help make organization universal.

Pride should stand in the way of letting another druggist fight your battles, battles that mean so much to you

and which can only be won by a solidly united front.

Money talks—let yours talk for your own good—and may the good cause of organization hasten the day when every retail druggist will be anxious to pay association dues promptly and when he will glory in the fact of so doing.

Business Cowards.

We would like to have druggists place themselves in such a mental attitude that they can see justice in the whipping administered by a parent on its offspring, when said offspring has done something wrong. The whipping is given that the wrong may be corrected, that it may not be repeated, **and because the parent loves its child.**

The writer is a fearless champion of the retail druggist's interests, and because of it, is going to speak plainly, not to hurt the reader's feelings, but to help the reader see his own faults, that he may correct them if he so chooses.

The average retail merchant, and this includes the druggist, is a business coward. He is afraid of himself and afraid of his competition. And because this is so, this retail merchant goes through his life, through his business career, with only a poor living. He inconsistently refuses to do anything except in a small way and is satisfied to "let well enough alone," no matter how small a slice he gets.

The average retail druggist is a thoroughly conscientious individual; he is able to and does render many valuable services to the public that he is neither thanked nor paid for; his experience, his study and his profession enables him to give a square deal on occasions when other merchants would possibly not consider a square deal worth while; he has the power of concise thought in a large degree, **and yet he is afraid of himself.**

Just think of the condition. Here is a city of four, ten, twenty or, in fact, any number of druggists, each afraid of himself and by the same token, each afraid of the other. No harmony exists and perhaps in many cases not even personal acquaintance.

You think every druggist in your town is your natural enemy and you begrudge him his daily bread, and yet you have no more right to feel that way toward him than he has toward you. You think if he sets a certain price on an article in an advertisement you must go him one better and cut below it; he has no right to have customers. You want it all.

No Really "Big" Man is Afraid.

And still you are afraid of him; and you are so afraid of yourself and your own business, that you will not give vent to the big things within you, which, if once allowed to flow out, will harmonize the entire drug fraternity of your city. You know for a positive fact that there actually is more drug business in your city than you and all your brother druggists can properly attend to with your present facilities. Now, if you want more business, stop being afraid of yourself and of your fellow druggists, and become big; that is, become a thinker—think, plan and act big. You have everything needed for such a condition, namely the opportunity, the material and the brains.

You must be big enough to talk things over with your brother druggists; plan with them for the development of your businesses. You need not do as he does to work in harmony with him. All you need to do is to conduct your affairs honestly and get all the business you can, honestly.

Of all the golden opportunities going to waste, the lack of organization among retail druggists in any given city, is probably the most conspicuous example. Often, very often in fact, the business you do has come to you naturally, and not because you developed it with your own initiative and personality.

Opportunity is at Your Door.

Get together and make up your minds to quit knocking your competitors, it has never done any of you one cent's worth of good. Get together and be chummy. Go fishing, hunting, skating, to theaters, to baseball games, to lodge meetings with your nearest competitor and be a good fellow.

Come to some agreements and stick to them like a leech. Be a man of your word.

The greatest and the most important thing in the retail drug business today is the druggist. It is not drugs, neither is it price. It is the man himself, the individual retail druggist, who if he chooses, can honestly become one of the most potent factors for good that has ever presented itself to the people of this nation.

Get together, work together, stick together; that's all there is to it, and what honest man will say it is impossible to do all three.

Look at what you have, Mr. Druggist, and then look and see what you can get in a business way. Look at it in a big way, get a proper view of the demands of the public, get a proper conception of people and things generally, and when you have done this, your business cowardice falls away, and you are what you were intended to be, a real business man, anxious to get into the real battle of life, a comrade for all your brother druggists and a foe to all the deceit, fraud and legislation with which the drug business is handicapped at the present time.

The Big Things.

Let us look at a few of these "big things" that require a big organization to control and to regulate and what do we find. First competition among druggists themselves has lowered the prices on many things to an abnormal degree; to produce figures for a working basis, say every druggist loses 50c each day, because of this.

Second, every druggist has, as a competitor, one or more medicine peddlers, illegitimate competition that it is possible to eradicate; this causes an average loss each day of some \$2 to each individual druggist in the country. (This figure is conservative and computed from an article in NOTES, December 17, 1908, entitled, "The Medicine Peddler.")

Third, the loss caused to the average retailer by the dispensing doctor is somewhat difficult to compute, as some druggists have little competition in

this respect, others a great deal. An average of \$2.00 per day for all druggists is certainly conservative.

Fourth, the competition from mail order houses of all kinds is certainly costing each druggist an average of \$1.00 per day.

There are other forms of unjust competition that can be reduced to a minimum, but these four will answer for an argument, as all four can be eradicated by organized effort. The four "big things" cause a loss of \$5.50 to **every retail druggist** in the country each day, a total of over \$2,000 per year, and considerable over half of this would be represented by clean profit.

Now, Mr. Druggist, besides all the other good things that come to an organization man, you can see for yourself that it is worth at least \$1,000 a year to you to be a good organization man. What more do you want? Is not such a result worth a tremendous effort on your part?

Is \$1,000 a Year Worth While.

Go and preach organization to your nearest neighbor and show him these figures. Tell him a story somewhat like this: Competition among ourselves will quickly be eliminated if we establish a uniform scale of prices and cease being afraid of each other; competition from medicine peddlers can be removed by our organization if we demand an itinerant vending law, and working hard to place such a law on

the statute books and never ceasing until it is enacted—intelligent and collective advertising will also greatly lessen this evil; competition from the dispensing doctor will become an insignificant evil if consistent, collective and constant propaganda work is done with them; competition from the mail-order houses is best met by intelligent advertising and by our organization watching the various parcels-post schemes originating in Congress.

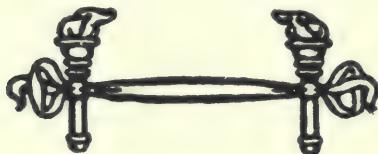
Such a story should not take much effort on your part, when anybody can see that by the united action of all, or very nearly all druggists, an added \$2000 per year will be his part of the receipts.

Dues vs. Profits.

But we must be big; we must not begrudge to pay a little \$10 or \$25 for yearly dues to carry on such work. And if \$10 a year dues brings visible results you should not begrudge \$50 a year dues if you see \$2000 coming back, nor should you hesitate to pay \$100 a year into your organization treasury, if thereby you can see the elimination of some of the evils against which you are now competing.

Be big, act big, spend big money, and big things will come to you in return, and do not be a business coward. Stop dreaming, stop putting it off, but work and arouse the necessary enthusiasm and start this work, **now**.

Action is what is needed.



Index

To get the full value of any special name or subject appearing in this Index, it will be most profitable to read the entire chapter in which it may appear. In fact, the entire contents of the book are so important and are written in such readable style, that it would appear that every pharmacist will read the book from cover to cover.

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